



# Global Data Synchronisation Network (GDSN) and Classification Overview

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# GDSN Organization and Activity

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# What is GDSN, Inc.?



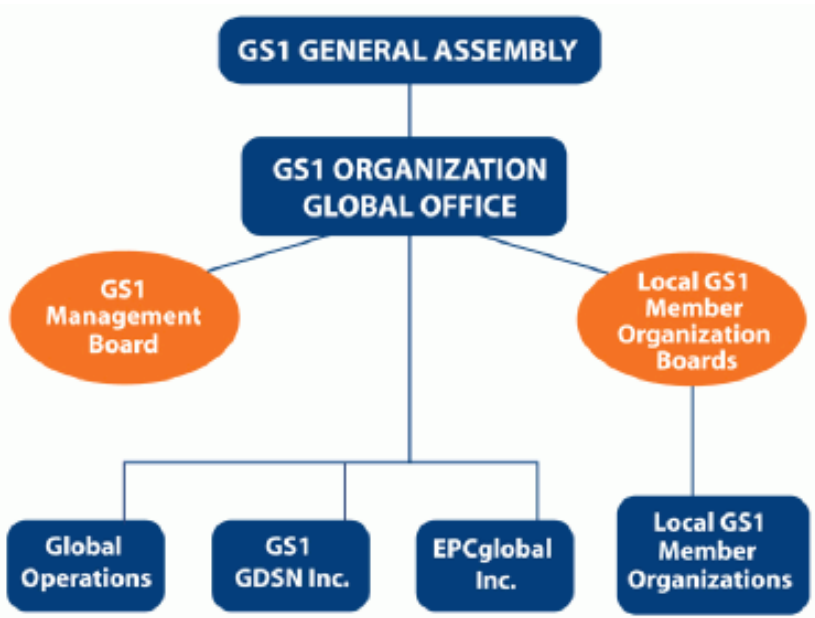
Not-for-profit business chartered to promote and guide standards-compliant GDS activity across the globe via the GDSN

Provides oversight of the Global Registry, GDSN Community collaboration, Global Product Classification (GPC) and the industry Data Quality Protocol

Business unit of GS1 Global Office



# GDSN Within GS1



## Board of Directors



Ahold, Nestlé, Unilever, GS1 Australia/Colombia/France/Germany/US, METRO Group, P&G, Smucker's, TESCO, Wegmans, WAL\*MART, GXS, AGENTRICS



# GDSN and Global Registry Background

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# Current Communications Process

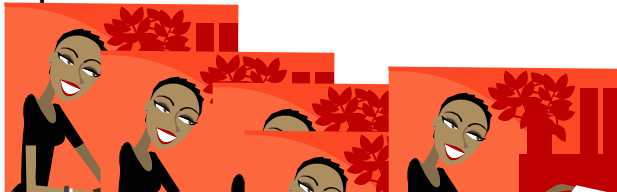
Manufacturer sells product to Retailer and sends product information to Retailer via EDI, fax, paper form



Retailer inputs product information into computer (POS, etc) systems



Manufacturer makes change to product and sends changes to Retailer via EDI, fax, paper form



Retailer inputs changes into computer



**Numerous interactions leads to numerous errors**





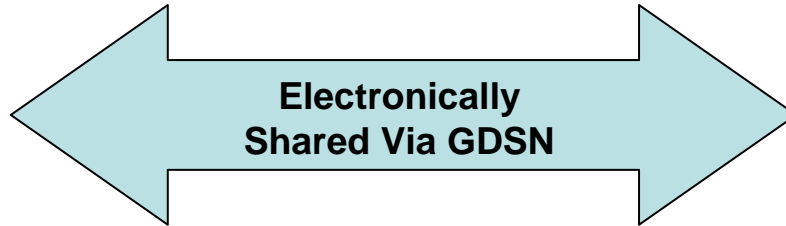
# Data Synchronization is....

- Electronic transfer of standardized item and location information AND the continuous harmonization of that data over time
- Involves sharing standardized information
  - Item information (GTIN) including attributes controlled by the brand owner/data source (e.g. net content, dimensions, weights)
  - Location information (GLN) including locations involved in trade (e.g. headquarter, billing, ship to)
- Facilitates communication among trading partners



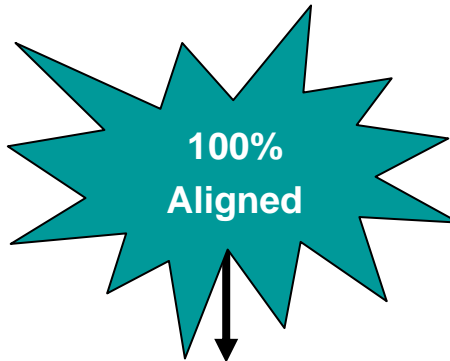
# Data Sync Overview

**Retailer**



**Manufacturer**

- GTIN Case Code
- GTIN Package Code
- Package dimensions
- Product Weights
- TI/HI



- GTIN Case Code
- GTIN Package Code
- Package dimensions
- Product Weights
- TI/HI

**Ongoing Practices**

- New Items/New Authorizations
- Product Changes/Updates
- Special Packs, Modules

**Objective:**

**Improved Transaction Accuracy**

- Invoice, Payment, Orders

**Improved Speed to Market**

**Better Consumer Value**





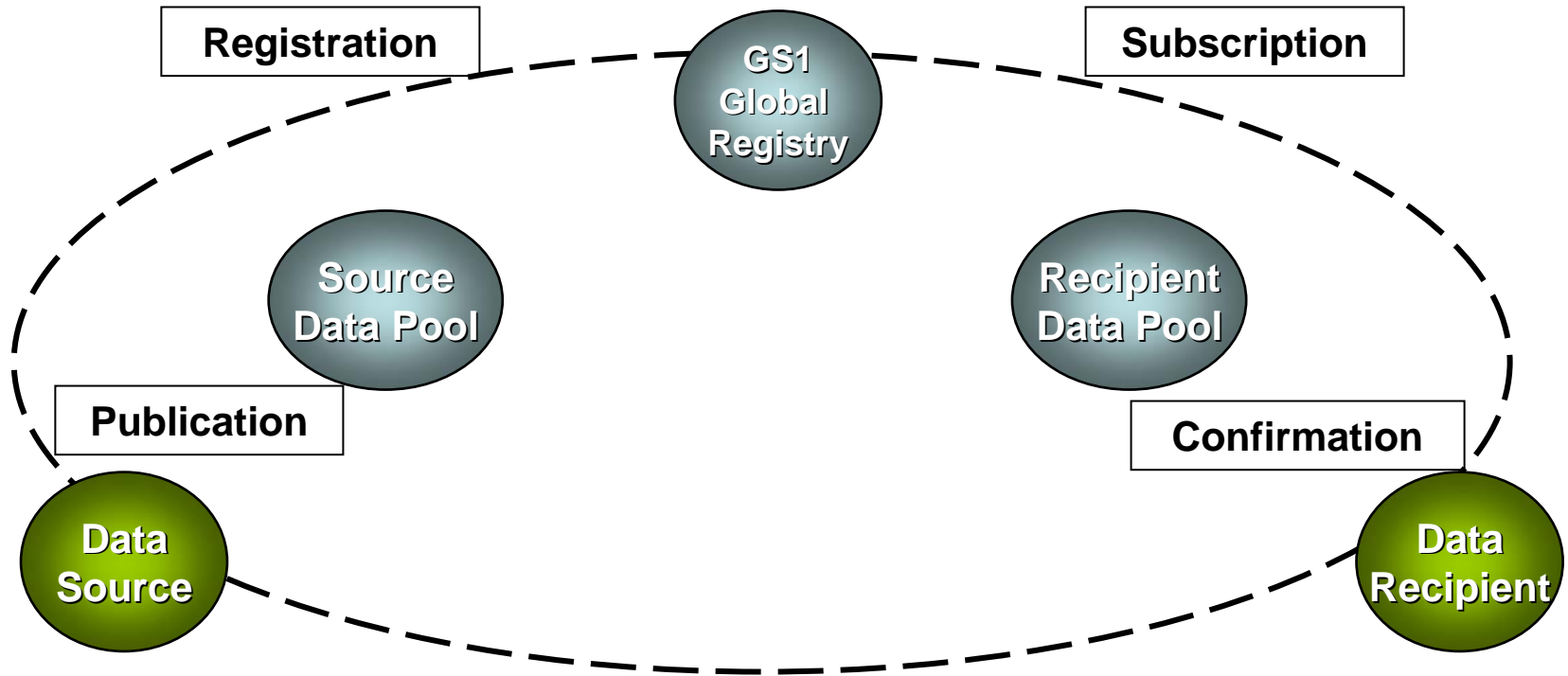
## Global Data Synchronisation Network

- Registry for Registration of Items and Parties, and Global Search
- Retailers and Suppliers have single point of access via Certified Data Pools
- Standards compliant data and messages



# Global Data Synchronization Network (GDSN)

The GDSN is comprised of a single registry (GS1Global Registry), Data Pools, and trading partners working together to establish technology solutions, business processes, and standards to support data synchronization.





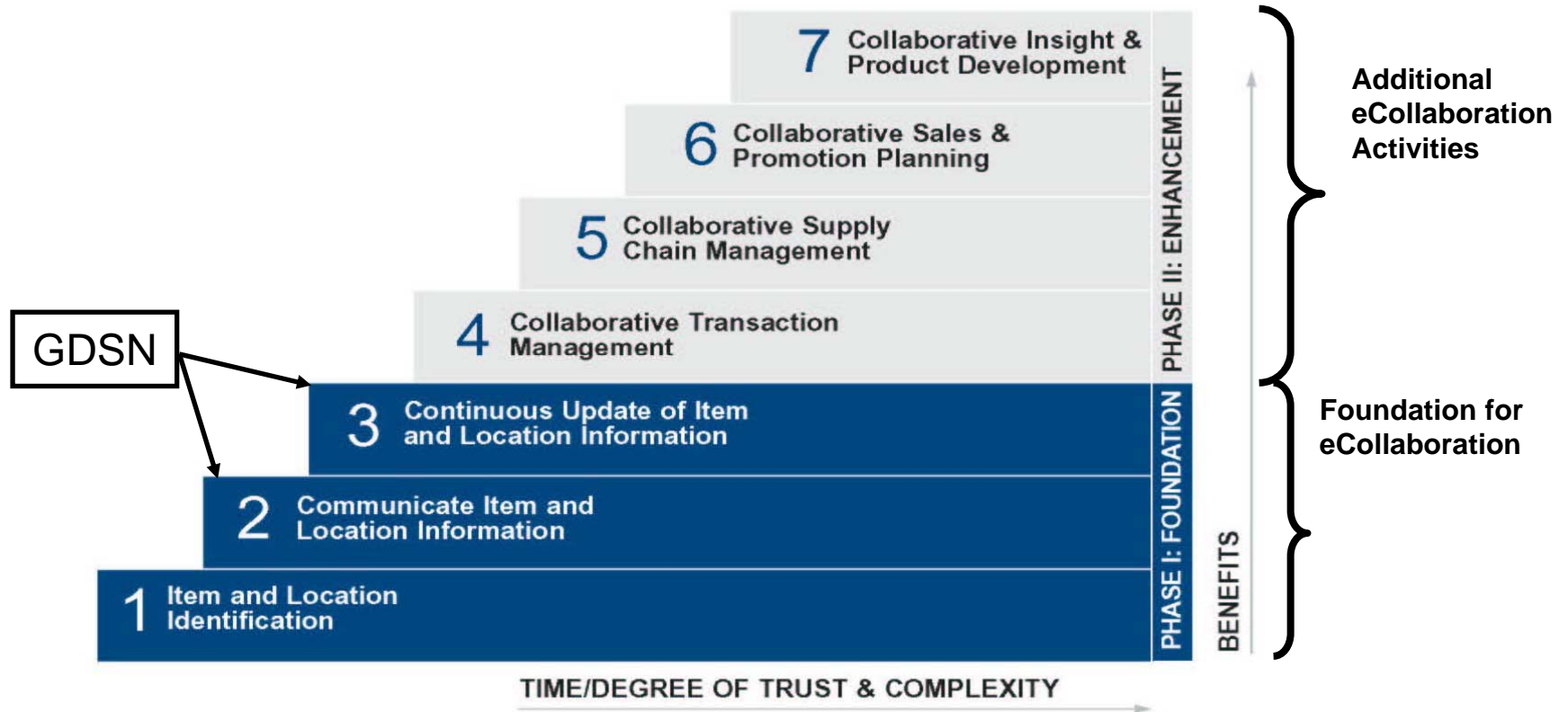
# GDSN Benefits and ROI

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# The Steps to Collaborative Commerce



Source: GS1 US™ and AT Kearney



# Industry Studies Quantify the Opportunity



## Catalog Disparities



- Incorrect - 30% of Item Data
- To Correct - \$60-\$80 per Error
- Cleanse - 25 minutes per SKU per year



## Invoice Errors



- Incorrect - 60% have Errors
- Costs - 43% have Deductions
- To Correct - \$40-\$400 to Reconcile















## Lost Sales Opportunity



- Product Roll-In - 4 Weeks on Average
- Lost Sales - 3.5% due to Inaccurate data



# GDS Benefits Overview

BENEFIT	RETAILER	MANUFACTURER
Inventory Reduction	0.5 – 1.0% 	0.5 – 1.0% 
Out of Stock %	2 – 4% 	2 – 4% 
Cost of Reconciliation Errors	5 – 10% 	10 – 20% Customer service and finance 
Logistics costs	1% or more 	1% or more 
Receiving times	+1000 hrs 	+1000 hours 
Speed to Market	2 weeks 	2 weeks 

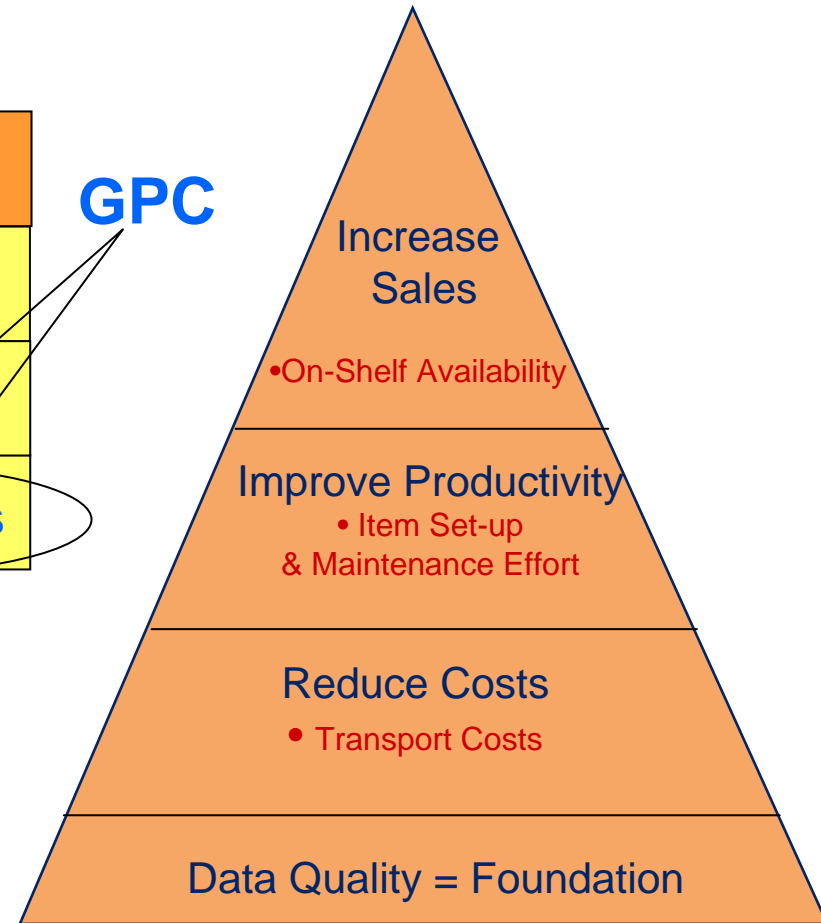


# GPC Contribution to GDSN Benefits - J&J Decreased Out-of-Stocks With GDSN at Wal\*Mart



Scope of GDS Activities	
Companies	J&J and Wal*Mart in US
Data Pools	1SYNC (GS1 US)
Assortment	1300 SKU's <b>75 categories</b>

**GPC**



Measured Benefits	
On shelf Availability	2.5 % fewer out-of-stocks
Item Set-up & Maintenance	Decrease from 10 days to 24 hours
Transportation Costs	Optimised truckload-planning



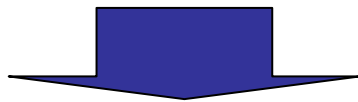


# Albert Heijn Reduces Data Management Effort by 30%

## The Netherlands

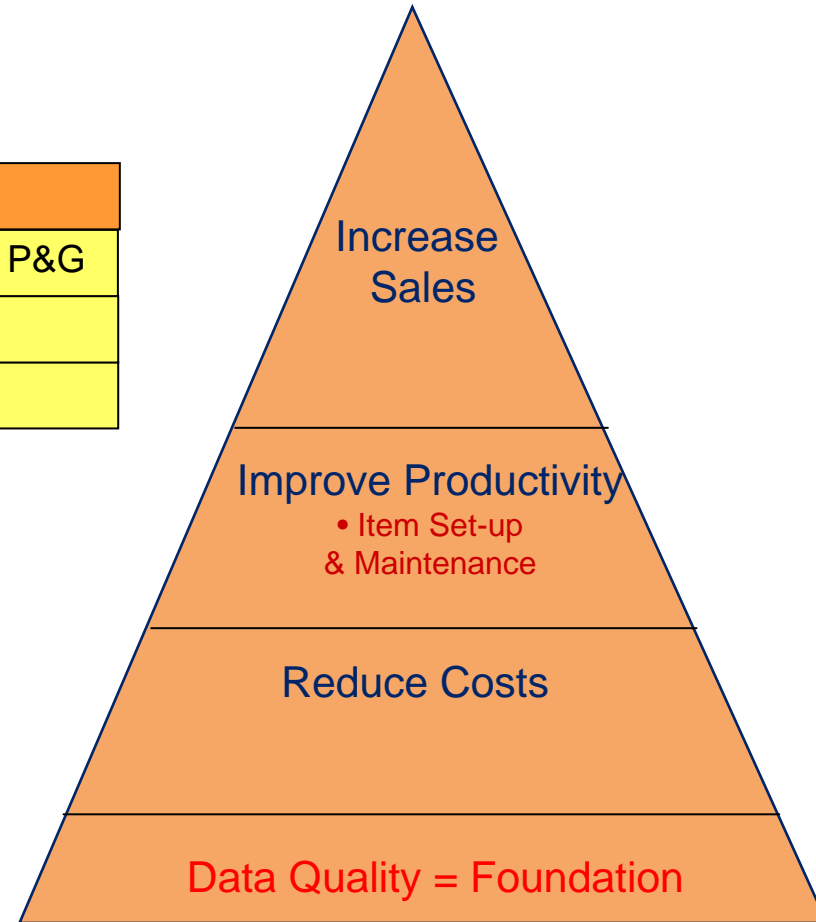
### Scope of GDS Activities

Companies	SCA Hygiene, Kimberly-Clark, Ontex & P&G
Data Pools	Agentrics and GS1 Netherlands
Assortment	Female Hygiene Category



### Measured Benefits

Item Set-up & Maintenance Effort	30 % reduction in data management effort
Data Quality	Elimination of dimension discrepancies (before: 40% of attributes were incorrect)







# Summary of GDSN Benefits

## GDSN:

- Provides **standardised, reliable data** for effective business transactions in both local and global markets, **driving costs out of the supply chain**
- Ensures that **trading partners work in a standardised way** thereby reducing duplicate systems and processes
- Ensures that **item data is updated and consistent** between trading partners, and that the item is unique
- **Validates accuracy of data** against standards and business rules



# GDSN Participants

## Retailers

- AAFES
- Ahold
- Albertson's
- Best Buy
- Carrefour
- Coop Italia
- Dairy Farm Group
- Exito
- Home Depot
- Kohl's
- Lowe's
- Safeway
- Staples
- Supervalu
- Target
- Walgreens
- Wal\*Mart
- Wegmans

## Suppliers/Manufacturers

- Alberto Culver
- Alcon
- Bayer
- Cadbury Schweppes
- Coca-Cola
- Colgate Palmolive
- ConAgra
- Clorox
- Danone
- Del Monte
- Eastman Kodak
- Energizer
- Eveready
- General Mills
- Gillette
- Glaxo Smith Kline
- Heinz
- Jergens
- Johnson & Johnson
- Kellogg Company
- Kimberly Clark
- Kraft
- Intuit
- Mattel, Inc.
- Nestle
- Memorex
- Neutrogena
- Parmalat
- Pepsi
- Philips Cons. Electronics
- Procter & Gamble
- Revlon
- J.M. Smucker
- Sony
- Unilever
- Zenith



# GDSN Growth Jan 2005 – September 2006

	Jan 2005	Feb 2006	8 Sept 2006
<b>Active Data Pools</b>	7	7	12 (20 Certified)
<b>Subscribers / Users</b>	200	3,778 <i>110 retailers</i> <i>3,668 manufacturers</i>	<b>10,252</b> <i>116 retailers</i> <i>10,136 suppliers</i>
<b>GTINs (Items) Registered</b>	180,000	479,000	915,000



# GPC and UNSPSC

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# GPC – UNSPSC are Complementary

## 1. GPC

- GPC has well-proven, robust business rules
- GPC is managed through Global Standard Management Process (GSMP)
- GPC is the classification schema used in the GDSN by data pools, retailers and suppliers

## 2. UNSPSC

- UNSPSC covers 55 segments, including products and services
- UNSPSC is a globally recognised system
- Visibility of spend analysis; cost-effective procurement optimization and exploitation of electronic commerce capabilities



# Current Healthcare Classification Coverage at GS1

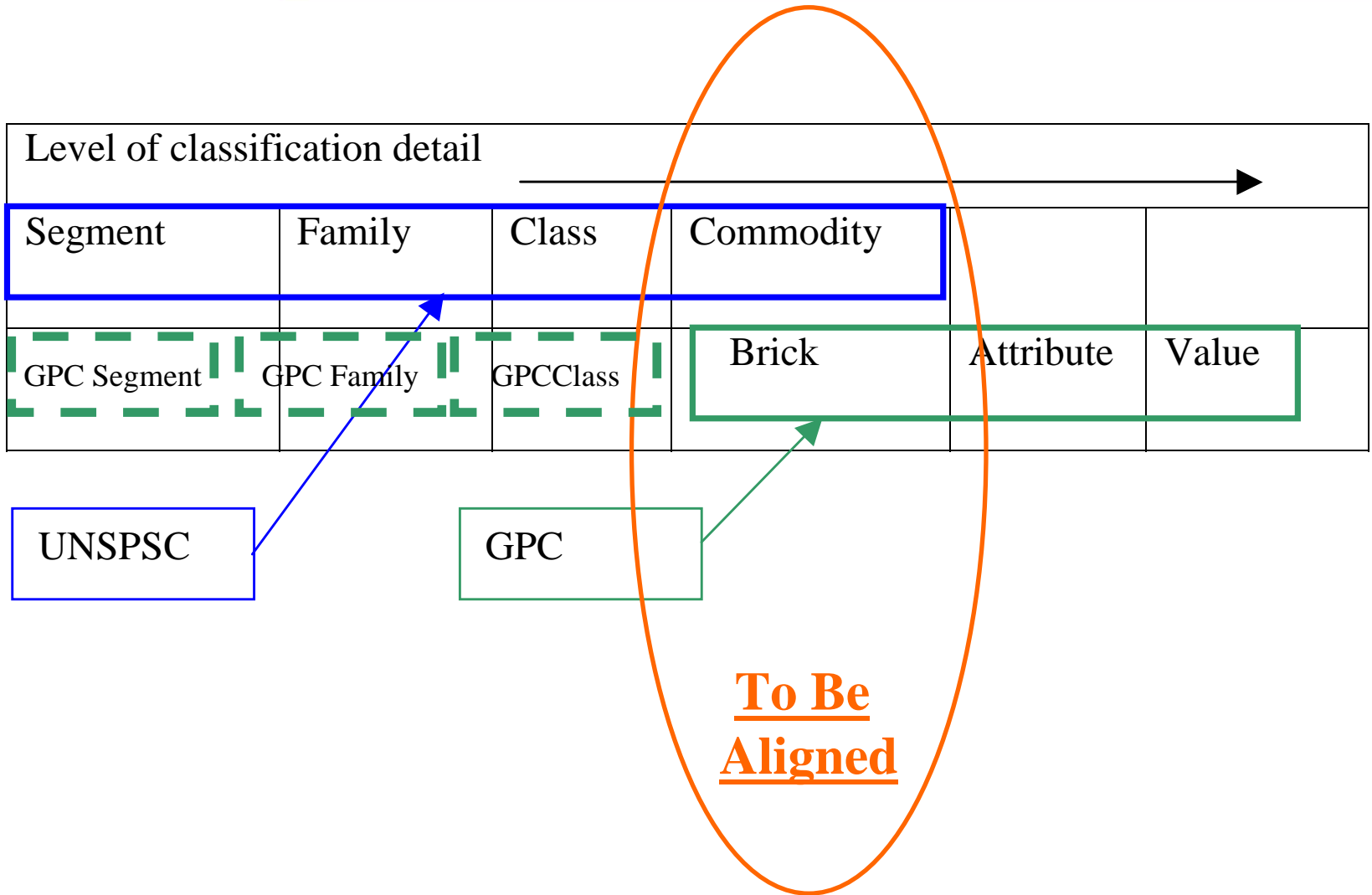
## 1. Global Product Classification (GPC)

- Over The Counter (OTC) Products:
  - Family Planning
  - Health Enhancement
  - Health Treatments and Aids
  - Home Diagnostics

## 2. United Nations Standard Product and Services Code (UNSPSC)

- Medical Equipment and Accessories and Supplies
- Drugs and Pharmaceutical Products
- Healthcare Services

# What Will Alignment Look Like?





# Vitamin Example: Integrated UNSPSC / GPC System Extention to Commodity Atributes and Product Attributes

UNSPSC SEGMENT: **51 00 00 00 Drugs and Pharmaceutical Products**  
 UNSPSC FAMILY: **51 19 00 00 Agents affecting water & electrolytes**  
 UNSPSC CLASS: **51 19 19 00 Dietary Supplements & nutritional therapy**  
 UNSPSC COMMODITY/  
 GPC BRICK : **51 19 19 05 Vitamin supplements**

*UNSPSC/GPC  
Hierarchy*

Commodity / Brick Attributes & Values: Consumer Life stage: **ADULT**  
 Source: **BOTANICAL**  
 Target Gender: **UNISEX**  
 Admin Method: **ORAL**  
 Vitamins/Minerals: **COMBINATION**

*Commodity/Brick  
Attributes and  
Values*

Product Description: **Super Vitamin**  
Net Weight: **100 gram**  
Price: **Euro 12.00**  
First Order Date: **23 September 2006**



*GS1 Product  
Attributes and  
Values*

GTIN: **4567890123456C;**  
GLN: **321012987654C**  
Target Market: **France**

*GS1 Product  
Identification*





# Integration Benefits for Healthcare

- Further improve the spend visibility and analysis
- Optimise cost-effective procurement and strategic sourcing
- Map products to existing internal and external classification systems
- Extend classification system to commodity attributes and product attributes
- Improve decision making with better statistics and reporting
- Be linked to a broader global GS1 standard package



# Implementation

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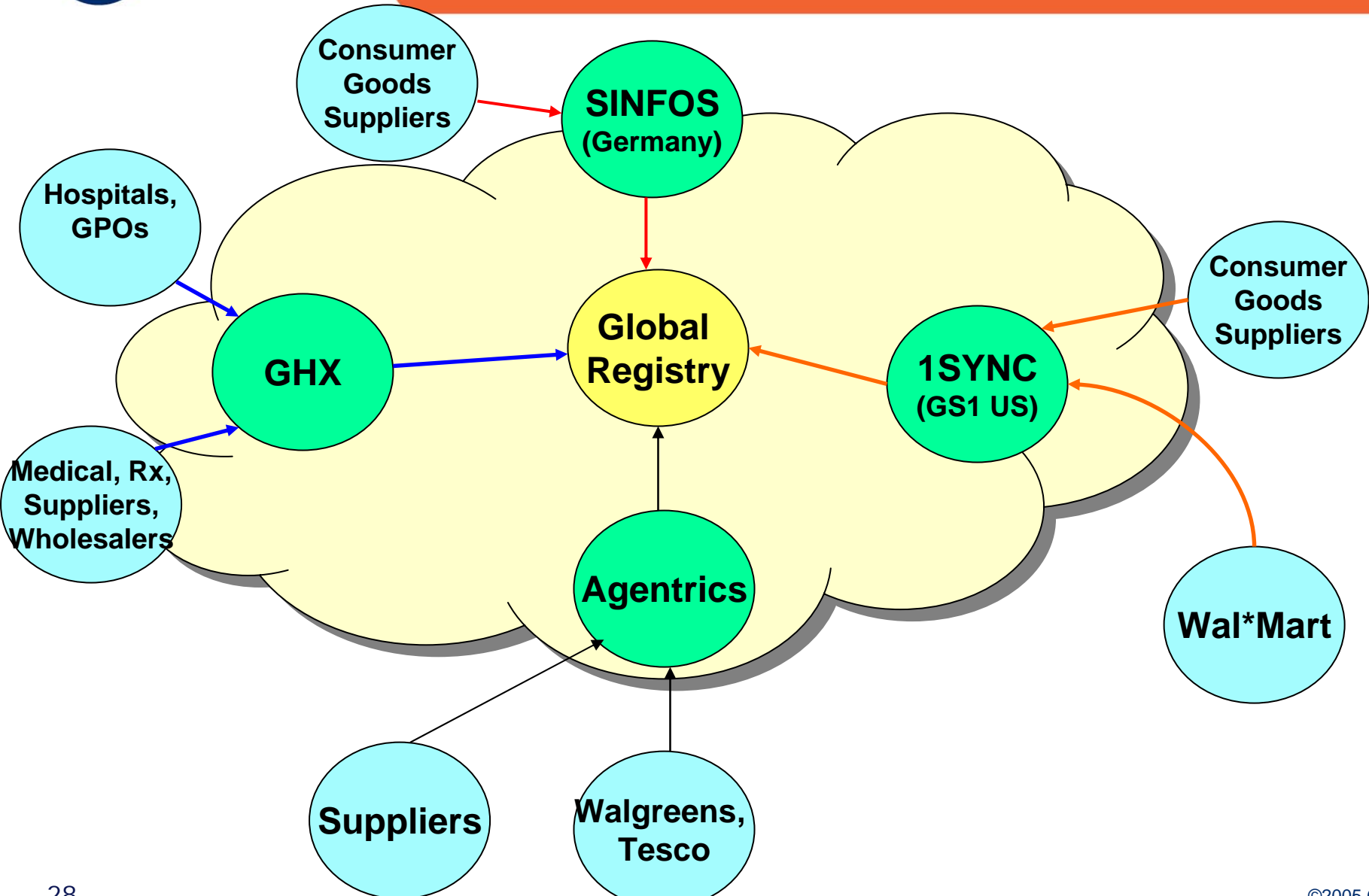


# The Players

- Trading Partners
  - Suppliers and manufacturers
  - Wholesalers
  - Retail Pharma
  - Hospitals
  - GPOs
- Data Pools
- GDSN, Inc.
  - Global Registry
  - GDSN Governance
- GS1
  - GS1 System Standards
  - Classification (UNSPSC and GPC)
  - GS1 Global Healthcare User Group (HUG)



# GDSN for Healthcare: A Perspective





# Trading Partner Actions

- Ready your organizations internally for data synchronization
  - Executive Commitment
  - Education
  - Sponsorship across Commercial, Supply Chain, IT and Finance
  - Develop business case
  - Begin internal process and data alignment
- Participate in industry initiatives to drive standards
  - GS1 HUG → GDSN User Group
  - Use GLN and GTIN standards
- Move to standards compliance, then to local synchronisation, and then to global data synchronization



# GDSN and GS1 Actions

- Expand GS1 System Standards to support Healthcare Sector requirements
  - 85 Healthcare-applicable attributes currently available (dimensions, quantity, trade item core data, order, ship, storage)
  - Standards-compliant data synchronisation for local and global markets
- GS1 HUG continue to understand requirements and represent the collective community
- Communicate across network of 104 GS1 MOs
- Maintain established network of GDSN certified Data Pools
  - Currently 20 Data Pools supporting data sync in 30+ countries



# Healthcare Attribute Support Today

agreedMaximumBuyingQuantity
agreedMinimumBuyingQuantity
brandName
consumerAvailabilityDateTime
deliveryToDistributionCenterTemperatureMaximum
deliveryToDistributionCenterTemperatureMinimum
deliveryToMarketTemperatureMaximum
deliveryToMarketTemperatureMinimum
depth
descriptionShort
diameter
endDateMaximumBuyingQuantity
endDateMinimumBuyingQuantity
endDateTimeOfExclusivity
firstdeliverydatetime
firstOrderDate
firstShipDate
functionalName
<b>genericIngredient</b>
<b>genericIngredientStrength</b>

goodsPickUpLeadTime
grossWeight
handlingInstructionsCode
hasBatchNumber
height
importClassificationType
importClassificationValue
<b>ingredientStrength</b>
invoiceName
isnetContentDeclarationIndicated
isNonSoldTradeItemReturnable
isPackagingMarkedReturnable
isPackagingMarkedWithIngredients
isTradeItemAnOrderableUnit
isTradeItemReorderable
lastOrderDate
lastShipDate
linktoexternaldescription
materialSafetyDataSheet
materialSafetyDataSheetNumber
maximumBuyingQuantity



# Healthcare Attribute Support Today

minimumTradeltemLifespanFromTimeOfArrival
minimumTradeltemLifespanFromTimeOfProduction
netContent
netWeight
orderingLeadTime
orderingUnitOfMeasure
orderQuantityMaximum
OrderQuantityMinimum
orderQuantityMinimum
orderQuantityMultiple
orderSizingFactor
organicClaimAgency
<b>organicTradeltemCode</b>
packageMarksDietAllergen
packageMarksEnvironment
packageMarksEthical
packageMarksFreeFrom
packagingMarkedExpirationDateType
productRange
replacedTradeltemIdentification
retailPriceOnTradeltem

returnablePackageDepositAmount
returnablePackageDepositCode
securityTagLocation
securityTagType
sellingUnitOfMeasure
startDateMaximumBuyingQuantity
startDateMinimumBuyingQuantity
storageHandlingHumidityMaximum
storageHandlingHumidityMinimum
storageHandlingTemperatureMaximum
storageHandlingTemperatureMinimum
subBrand
suggestedRetailPrice
tradeltemCountryOfAssembly
tradeltemCountryOfOrigin
tradeltemFeatureBenefit
<b>tradeltemFormDescription</b>
tradeltemMarketingMessage
tradeltemUnitDescriptor
variableTradeltemType
variant
width





**Thank you!**

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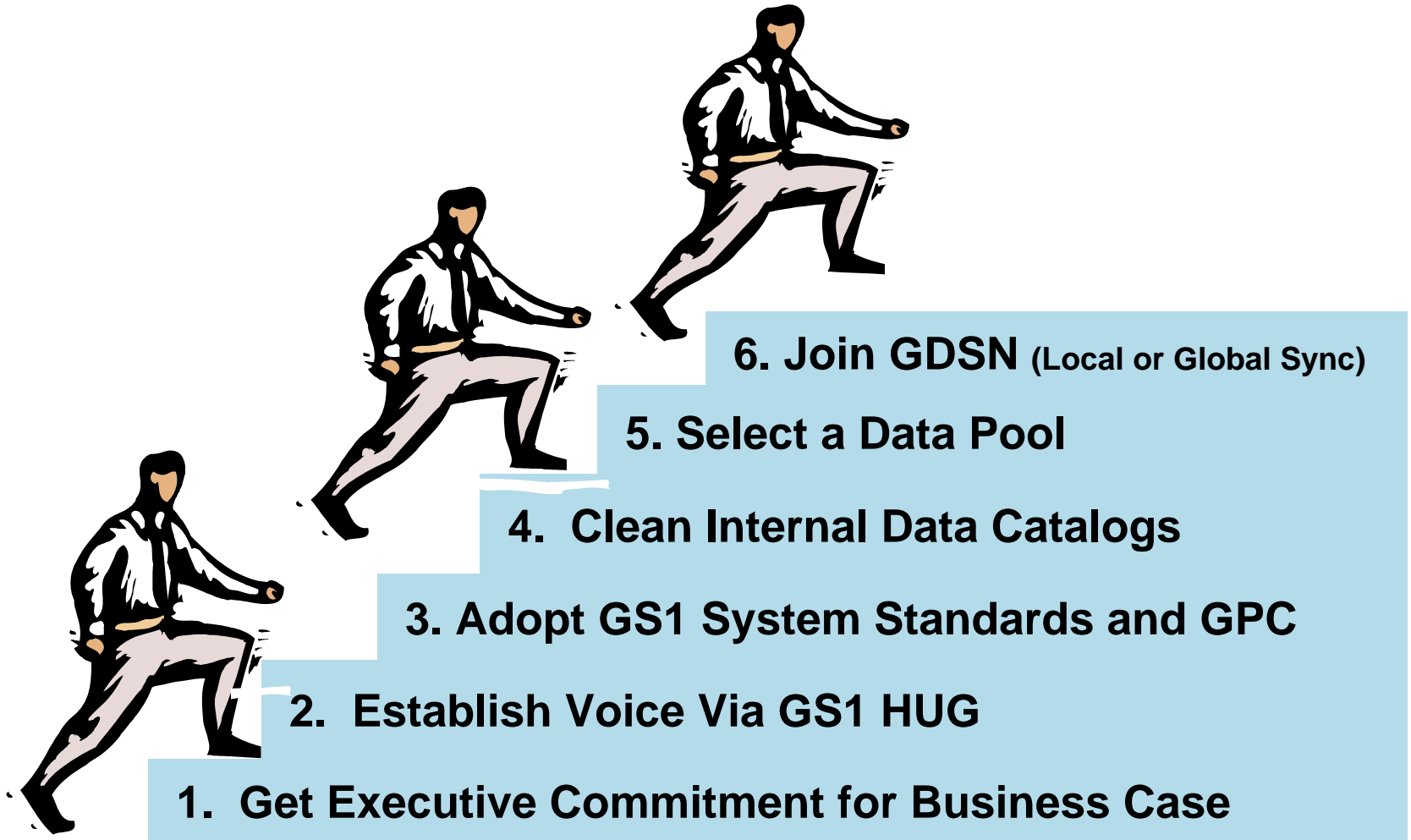
# Backup Slides

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# Users: Implementation Steps



Accurate, synchronized data eliminates many manual processes item setup and maintenance



## Sales Representative Value Add

- No need to fill out new item forms for all customers
- No need to communicate changes and corrections
- More time can be spent building sales



## Merchandising Administration

- No more data entry of new items forms
- Elimination of key entry errors
- No more paper trail from merch=>pricing=>logistics=>accounting



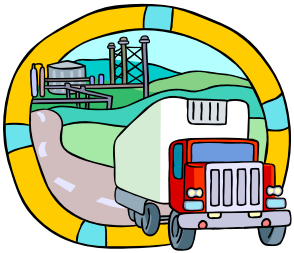
## Improved Sales

- New item processes reduced
- Merchant administrative time can be reinvested in building sales
- Better visibility to more supplier catalogs



# Logistics and Distribution Benefits

Synchronized and accurate cube and weight data will allow:



Inbound and outbound truckloads to be better utilized reducing freight costs and increasing efficiency



Inbound truckloads received and put away efficiently reducing time, handling, cost and improving shelf service levels



# Accounting Benefits

Accurate and synchronized data will improve invoice accuracy and associated reconciliation processes



## Invoice reconciliation

- More invoices will be accurate
- More streamlined/timely processes for resolving invoice discrepancies
- Reduced out of period adjustments which will make financial information more actionable
- Reduced receiving quantity errors to be reconciled



# Accurate Data Synchronisation Benefits at Wegmans

- **Transportation Savings: \$3.5 million dollars annually**
- **New Item Introduction: Improved speed to shelf**
- **Distribution Network: \$1 million in labor and inventory carrying costs**



# Suppliers Are Finding Significant Benefits

## **Transportation Savings:**

- One company corrected a weight error on a top selling item and saved \$2.5 million in transportation costs for one product line – with a potential to save an additional \$1.5-3 million for additional product lines

## **New Item Introduction:**

- Improved the speed to shelf of new products from 4-8 weeks to 2 weeks
- Increased the number of new items introduced in one year by 50%, with no new headcount

## **Order Administration:**

- One company will increase administrative productivity by 59,000 hours annually by reducing inspection time of each order by just 5 minutes

## **Distribution Network:**

- One company improved information transfer through its distribution network from 5-6 days to 2 days





# Acronyms

## **GDSN** – Global Data Synchronization Network

- The GS1 Global Registry™ and a network of interoperable certified data pools that enable data synchronization per GS1 System standard

## **GSMP** – Global Standards Management Process

- The procedures, methods, and practices that develop and maintain the GS1 System standards. GS1 manages the Global Standards Management Process.



# Acronyms

**GTIN**<sup>®</sup> – Global Trade Item Number

**GLN** – Global Location Number

**GPC**- Global Product Classification Code

**CIS** – Catalogue Item Subscription

**CIN** – Catalogue Item Notification

**CIC** – Catalogue Item Confirmation



# Additional Information on GDSN and GSMP

For more information on GDSN

- [www.gs1.org/productsolutions/gdsn/](http://www.gs1.org/productsolutions/gdsn/)

For more information on GSMP

- [http://www.gs1.org/global\\_smp/gsmg\\_smp.htm/](http://www.gs1.org/global_smp/gsmg_smp.htm/)



# Where to Find GS1 Classification Information?

## 1. GPC

- GPC Website: <http://www.gs1.org/productssolutions/gdsn/gpc/>
- Contact: Zoltan Patkai - [Zoltan.Patkai@gs1.org](mailto:Zoltan.Patkai@gs1.org) +32.2.788.78.29

## 2. UNSPSC

- UNSPSC Website: <http://www.unspsc.org/>
- Contact: Steve R. Arens – [SArens@gs1us.org](mailto:SArens@gs1us.org) +1. 609.620.4511