



GS1 GDSN: Proven Benefits for Trading Partners

Speaker's Name

Date

Event/Place





Introduction: What is data synchronisation?



What is data synchronisation?

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

But when one company needs to **change** any bit of information in their database or **add a new item** to it, **another database may not be up to date anymore...!**



What is data synchronisation?

**That's where
synchronising data
through the GDSN
comes in**



**Sharing reliable
master data through
Global Data
Synchronisation**

Demand side



Supply side

Synchronising master data

Height
Width
Depth
Weight
Items per case
Cases per pallet
GTIN

**Supply side
Product
Database**



Height
Width
Depth
Weight
Items per case
Cases per pallet
GTIN

**Demand side
Product
Database**

**Trading partners
synchronising master data
can rely on the information
in their database**

The History of Data Exchange

**Unstructured messaging
(Catalogue, Listing, Mail, Fax, ...)**

**National EDI
(Tradacom, ...)**

**Global EDI
(EANCOM)**

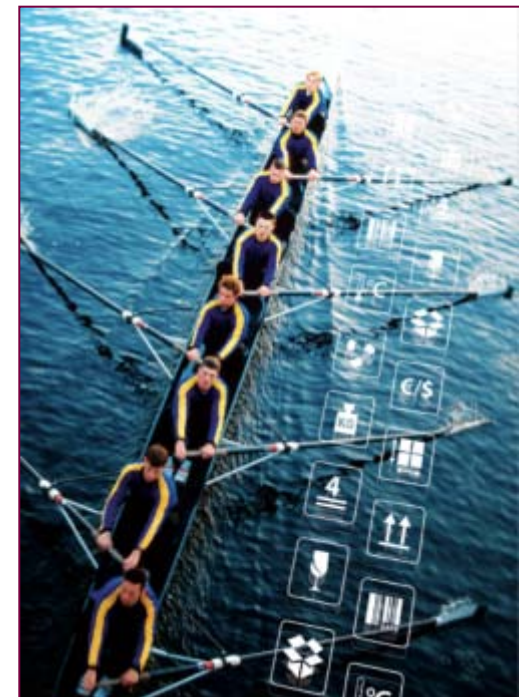
**Non-standard Data Sync
(National and industry catalogues)**

**Global Data Synchronisation Network
(GDSN-certified data pools)**



Enabling data synchronisation

The GS1 Global Data Synchronisation Network (GDSN) enables a single point of truth for master data.





Why synchronise data?



GDSN drives unnecessary costs out of the supply chain

Improved order accuracy, fewer forms to fill out, fewer duplicate systems and processes...

When a supplier and a customer know they are looking at the same accurate and up-to-date data, it is **smoother, quicker and less expensive** for them to do business together.

Increase value in logistics, accounting, customer service & inventory management

- Enhanced reporting, order tracking, & planning
- Simpler additions and changes
- Fewer complaints and disputes
- Better accuracy of orders, shipments, and receiving
- Lower logistics and labour costs
- Increased sales
- Much greater confidence in the information sent to and received from trading partners



GDSN creates opportunities

Enable innovative programmes, collaborative actions and new ways of working together

- Make global sourcing a reality
- Eliminate expensive redundancies in the IT system and internal business processes
- Create the foundation for data sharing
- Expand the supplier base
- Put an end to many time-consuming processes and manual forms
- Launch joint sales initiative programmes
- Establish transparency in sourcing and pricing

Without data synchronisation ...



Catalog Disparities



Incorrect: 30% of item data
To Correct: \$60-\$80 per error
Cleanse: 25 minutes/SKU/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

Industry studies quantify the inefficiencies

With data synchronisation ...

Supply side

- Time-to-shelf reduced by an average of 2 to 6 weeks
- Order & item administration improved by 67%
- Item data issues in sales process reduced by an average of 25% to 55%

Demand side

- Order & item administration improved by 50%
- Coupon rejection at the check-out reduced by 40%
- Data management efforts reduced by 30%
- Improvement of on-shelf availability, with out-of-stock items reduced from 8% to 3%

Industry studies quantify the benefits



The elements of global data synchronisation



The three elements of GDS

***When combined,
they provide a
powerful
environment for
secure and
continuous
synchronisation
of reliable data***



Data Synchronisation (GDSN)



Data Quality (DQF)



Product Classification (GPC)



Global Data Synchronisation Network



What is the GDSN?

The GS1 Global Data Synchronisation Network connects trading partners via a network of interoperable GDSN-certified data pools



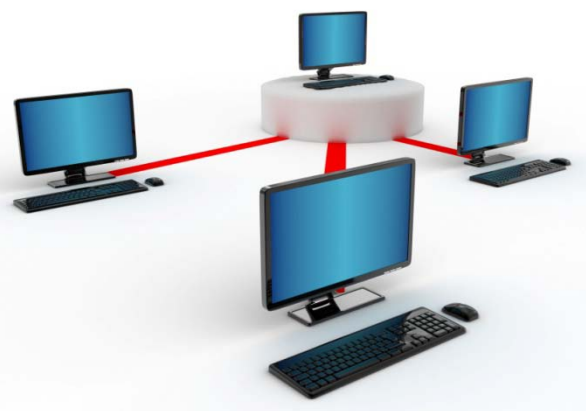
**Enables trading partners to share
reliable master data**



GDSN building blocks

GDSN-certified data pools

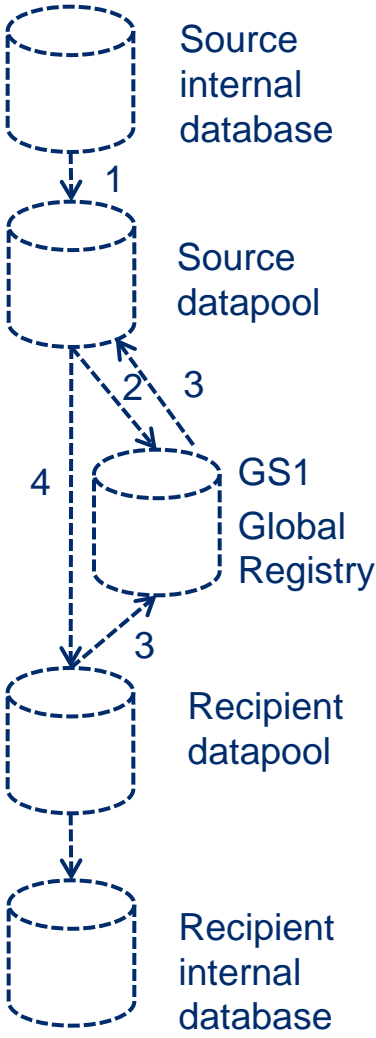
Interoperable electronic catalogues of standardised master data, ensuring the confidentiality and integrity of user information



GS1 Global registry

GDSN's "information directory" identifying where the information is held across the network and enabling the uniqueness of the registered items and parties

How the GDSN works



1. Load Data

- The information supplier loads product and company information in its data pool

2. Register Data

- A small subset of this data is sent to the GS1 Global Registry

3. Request Subscription

- The information recipient, through its own data pool, subscribes to receive the information

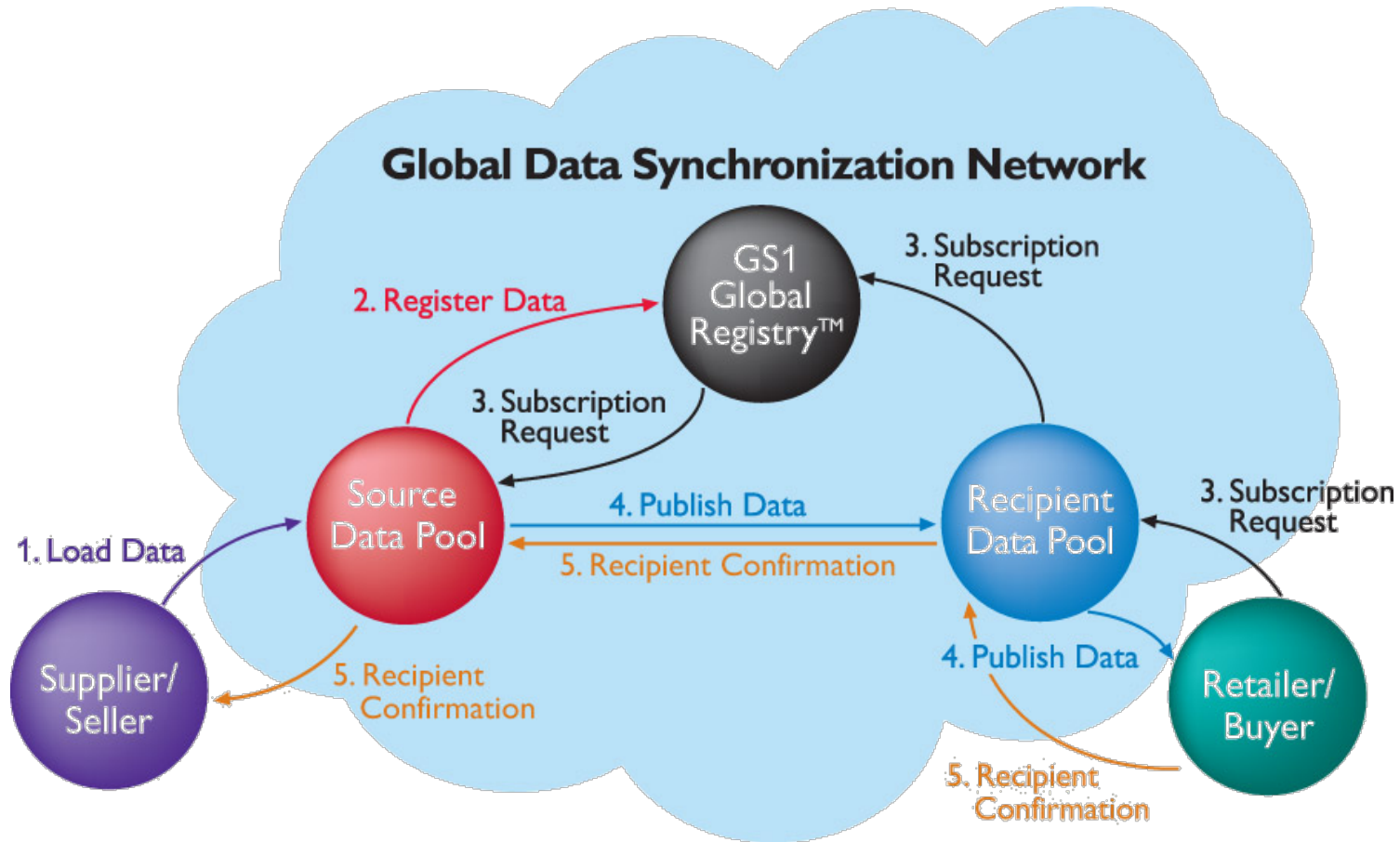
4. Publish Data

- The information supplier's data pool publishes the requested information to the information recipient's data pool

5. Confirm & Inform

- The information recipient sends a confirmation to the information supplier via each company's data pool, which informs the information supplier of the action taken by the information recipient retailer using the information

How the GDSN works



Identification in the GDSN

Within the GDSN, trade items are identified using a unique combination of GS1 identification keys, **Global Trade Item Numbers (GTINs)** and **Global Location Numbers (GLNs)**, and GDSN identification keys, **Target Market** and **Global Product Classification (GPC)**

GS1 Identification Keys

The Global Trade Item Number (GTIN) is a 14-digit number used to uniquely identify any **products** that will be priced, ordered or invoiced at any point within the supply chain.

The Global Location Number (GLN) is a 13-digit number used to uniquely identify information suppliers, such as distributors, brokers, and manufacturers, as well as legal entities and physical locations.



Get started with GDSN

**Contact GS1
or a GS1-certified
data pool
(www.gs1.org/gdsn)**

**Contact your
local GS1 MO
(www.gs1.org/contact)**

- Establish a core business team
- Build a company-specific business case
- Get commitment from senior management for the data synchronisation strategy
- Communicate with your trading partners
- Build an implementation team
- Choose a GDSN-certified Data Pool
- Implement a data quality programme
- Start working with a few key items and with a small number of trading partners
- Engage in pilot tests with selected partners



GDSN Today



Solid Base of Standards in Place



Business Messaging Standards

Trade Item Synchronisation

Extended Attributes

Package Measurement Rules

Catalogue Item Synchronisation

Data Quality Framework

Data Pool Certification

Price Synchronisation

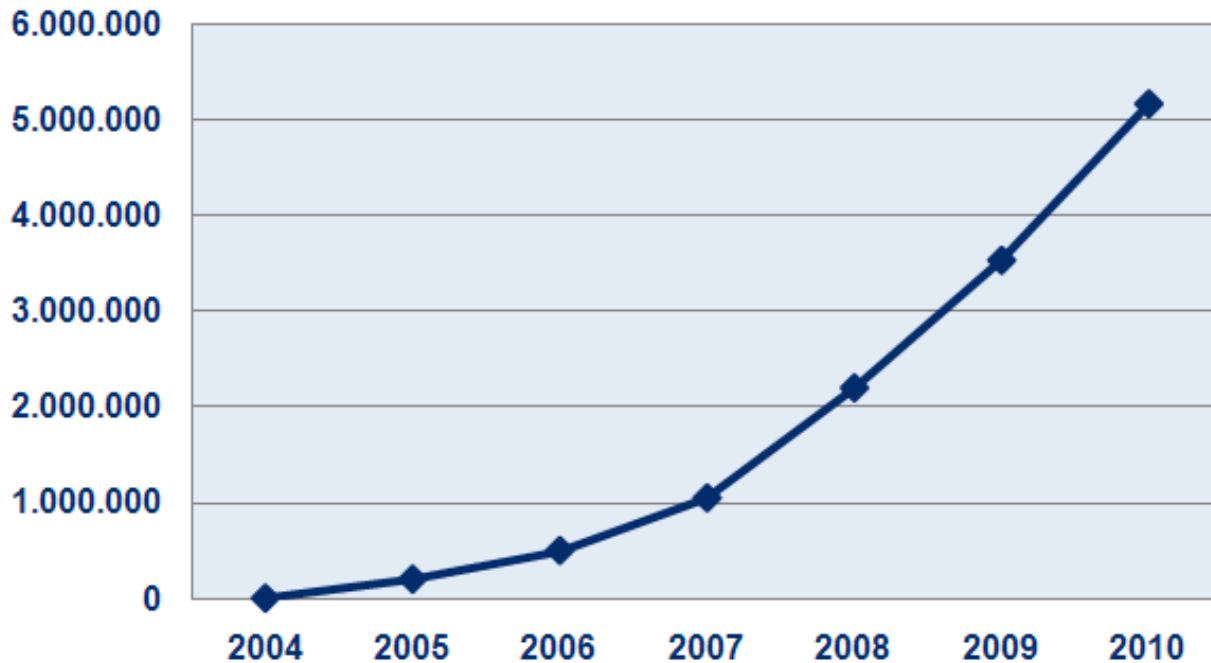
Global Product Classification
and more ...

Solid base of Standards and Guidelines in place

to build a reliable Master Data Management programme

GDSN in 5 years...

Items registered in the Global Registry



Trading Partners:
from **200** in 2005
to **23,570** in April 2010



GDSN in the world...



**28 GDSN-certified data pools support GDSN in
> 90 countries**





Data Quality Framework



Before data enters the GS1 GDSN, it must first be accurate

Data quality is essential to a successful data synchronisation programme

Synchronising incorrect or inaccurate data only creates problems, delays and costs in the supply chain



Good quality master data



Good quality master data is:

- Complete
- Consistent
- Accurate
- Time-stamped
- Based on industry standards



Sustainable data quality

Data quality is the **shared responsibility** of all trading partners:

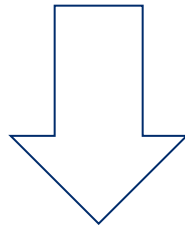
Information suppliers are the source of the product data and thus the starting point for improvements needed in data creation processes

Information recipients have the responsibility to maintain accurate data within their systems and ensure its integrity in their processes

Trading partners should **develop a sustainable data quality management system to ensure reliable data** is created by information suppliers and maintained by information recipients

GS1 Data Quality Framework

A Data Quality Management System (DQMS) provides a long term, sustainable, self-managed solution for data quality



The **GS1 Data Quality Framework** provides the basics to help organisations set up a DQMS



GS1 Data Quality Framework

- A **comprehensive best practice guide** to help ensure the proper levels of data quality
- A **self-assessment procedure**
 - to validate the existence and effectiveness of key data management business processes
 - may lead to a compliance statement
- An **inspection procedure** to physically validate product attributes

Get started with DQF



1. Top management commitment
2. Appoint responsible managers
3. Start data quality awareness programmes
4. Provide training
5. Create data quality management processes
6. Develop data quality management system documentation
7. Document control
8. Implementation and operation
9. Internal data quality audit
10. Management review
11. Conformity assessment
12. Continual improvement



Global Product Classification



Product classification



- Improves GDSN's accuracy & integrity
- Speeds up trading partner's ability to react to customer needs
- Helps break down language barriers
- Facilitates the reporting process across product categories



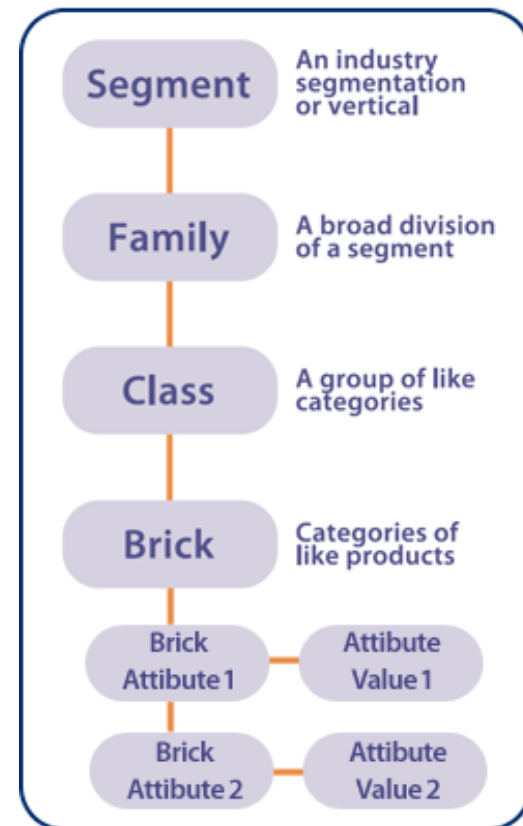
GDSN uses GS1 Global Product Classification (GPC)

- Ensures products are classified **correctly** and **uniformly**
- Gives buyers and sellers **a common language for grouping products** in the same way, everywhere in the world



The foundation of GPC is called a "Brick"

- Defines categories of similar products
- Ensures the correct recognition of the product category across the extended supply chain
- Bricks can be further characterised by Brick Attributes





GPC and UNSPSC



UNSPSC is a global, multi-sector classification system supporting primarily spend analysis and procurement

Under the leadership of the user community, GS1 is **aligning GPC with** another classification system managed by GS1 US, the United Nations Standard Products and Services Code - **UNSPSC**.

A online mapping tool will be made available early 2009

Get started with GPC



1. Go to the GS1 standards site www.gs1.org/gsm/
2. Find the published GPC schemas
3. Select the Segment where your product could be found
4. Open or Download the files
5. Search the hierarchies and Brick definitions to find your Brick
6. Locate the GPC Brick definition
7. Review the GPC Brick definition to confirm your product falls in this category
8. Record the information that will be required for data synchronisation
9. Use in your internal systems or selected data pool



GDSN Implementations



Company case studies

- **The following case studies indicate some key learnings from leading companies that have adopted GDS:**
 - Ahold: « Only a strong 'belief' from executive management that the benefits can be achieved helps to overcome the hurdles. »
 - Coca-Cola: « GDSN enables New Ways of Working Together eliminating disruptions and enabling growth. »
 - P&G: « The quality of our master data, which we share with our internal and external customers, and use to drive our business, is as important to P&G's success as the quality of our packaging and the products themselves. »
 - Supervalu: « Retailers and suppliers are successfully working together to eliminate friction in the supply chain caused by inaccurate data. Leveraging the GDSN standards provides a critical foundation for collaboration with our suppliers! »

Data Synchronisation

- For Albert Heijn the business trigger was to increase the data accuracy
 - 850 suppliers contacted for detailed planning via email
 - >350 suppliers live
 - Remaining 500:
 - 250 suppliers are a member of a GDSN certified datapool
 - 250 suppliers (mostly foreign suppliers) are not yet a member
 - 20-50 suppliers per month by Albert Heijn onboarding team

Only a strong “belief” from executive management that the benefits can be achieved helps to overcome the hurdles

Is GDSN a religion? You have to believe in it, otherwise it does not work!



Data Accuracy

- Data Quality Framework
 - Participated in initial Self-Assessment Spring 2007
 - KPI Self-Assessment Score
 - Total = 93.4%
 - Highest = 100%
 - Lowest = 74.1%
- We have a partially (60%) integrated process flow for item creation
- Product Life Cycle Management System is 3 years away from full process flow integration
- We have expansion and global implementation opportunities beyond our current Data Quality processes
- Like many other suppliers – our journey continues

Guiding Principle



“The quality of our master data, which we share with our internal and external customers, and use to drive our business, is as important to P&G’s success as the quality of our packaging and the products themselves”



Accurate Weights & Dimensions

Joint Value Business Case

P&G

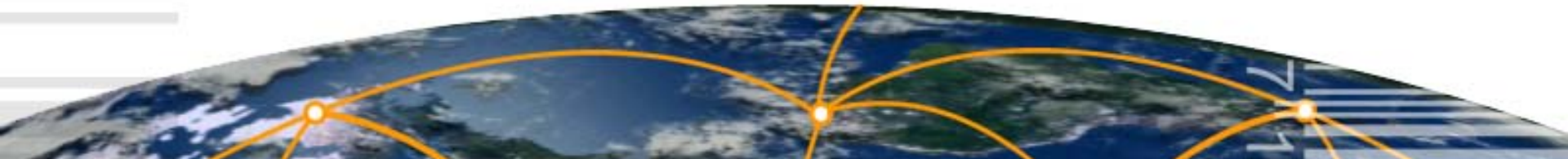
COST SAVINGS

Retailers

1. Eliminate Duplicate Measurement Processes
 - ~\$1MM opportunity
2. Improve Freight Utilization
 - \$2MM realized; single category
 - GBS to lead effort to uncover additional cost savings – by category
3. Cost Avoidance
 - Avoid 3rd party measurements



1. Eliminate Measurement Processes
 - Equipment costs ~\$10M per cubiscan
 - FTE costs
2. Optimize Distribution Network
 - e.g., Wegmans utilized up to 18% more outbound capacity by using accurate weights & dimensions data



SUPERVALU Current Status

- 610 suppliers in production
 - 550 suppliers 100% completed all items
- 50 suppliers in test
- Over 60% of non-perishable dollar volume
- Syncing almost 200,000 GTINs
- Process “relationship dependent data”
 - Suppliers publish by distribution center and can send different values by DC
 - Allows more accurate data to be sent
- Part of top to top meetings with our suppliers



Bad Data Creates Tremendous Inefficiencies

- **SUPERVALU leverages significant automation in the distribution process**
 - Majority of products are fully mechanized from
 - Put away
 - De-palletization
 - Picking
 - Store built pallets
- **Kick out products at for being over weight tolerance and have to manually validate**
- **Build pallets that exceed the dimensions**
- **Fines due to overweight truck**
- **Under utilize outbound trucks by over 5% because of bad data**

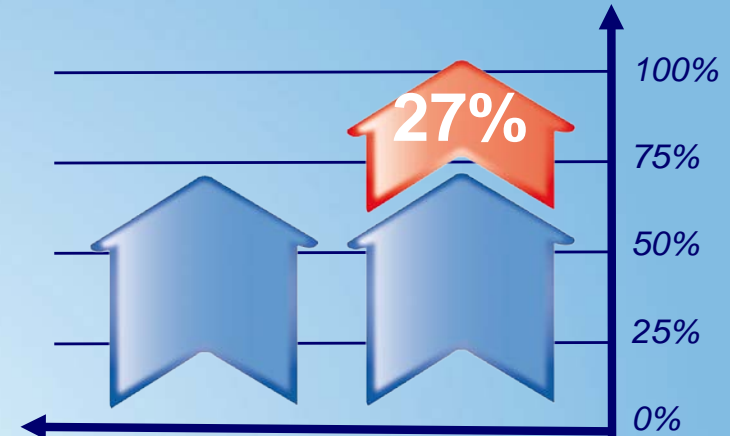


GDS KPI's Measurements:

Data Consistency

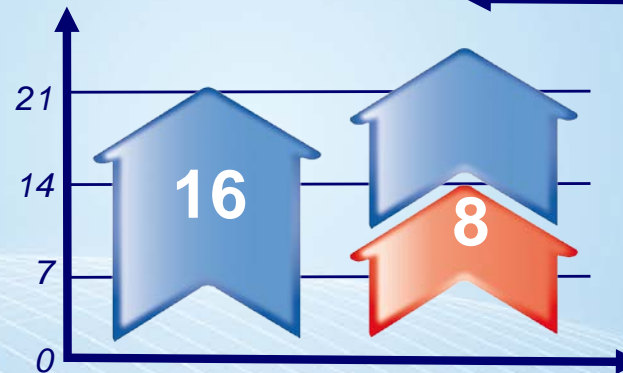
% item data with Correspondent attribute in Kraft Coop Master data

Data quality Increase



Time to market (dd)

Time needed for a product to be stored into master data



50% of time saving

Source: Coop assessment

Parameters

Time to market is related to all the activities of the process (eg. Send information, Manual data entry, paper production)





Conclusion



A powerful environment

***Global data
synchronisation
enables a single
point of truth for
master data in
the supply chain***



Data Synchronisation (GDSN)



Data Quality (DQF)



Product Classification (GPC)



The GDSN is in place



The infrastructure is there...

The standards are there...

It is a journey to get there, but the benefits are and will be substantial



For more information



www.gs1.org/gdsn





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