



GDS A global
solution for the growing
product data challenge



Our mission is to make it
faster, cheaper and **safer** for
our members to serve their
customers



Foreword

Global Data Synchronisation (GDS) is becoming an indispensable technology for any organisation that relies on accurate and up-to-date product data. The standards developed by industry and GS1 are essential to making the network operate effectively.

This document is designed to give you a full understanding of the technology, the case for implementing it and how we can work with you to make this possible for companies from across industry.

Best wishes,

Gary Lynch
Chief Executive
GS1 UK

About GS1 UK

GS1 UK is a not-for-profit organisation owned by its members. We develop and implement global supply chain standards to make it faster, cheaper and safer for our members to serve their customers, regardless of where they are in the world.

The basis of our standards is the accurate identification of items such as products, assets and even patients. We license globally unique numbers so that organisations can identify their items and develop global standards to help them share accurate data with their trading partners. We use our standards to develop solutions such as master data management, traceability and asset tracking, which tackle real issues in the supply chain.

GS1 standards are used over **six billion** times a day by millions of businesses globally.

GS1 UK was founded over **30** years ago and is one of **108** GS1 member organisations in over **150** countries worldwide.

£300m

Lost sales over the next
5 years

£475m

Admin shrinkage over
5 years

£235m

5 year cost of
corrections and manual
work arounds for
retailers and suppliers

80%

The level of industry
product data
inaccuracy

66 to 250

Forecast growth in
number of product
attributes

The data quality issue - a billion pound opportunity

Despite the global success of leading UK companies, many are behind the curve in addressing the issue of poor product data.

Our recent Data Crunch Report, produced in association with Cranfield University, identified that the scale of the problem is much larger than many might expect. We compared the data on grocery products held by four of the largest supermarket retailers and matched this against the same product data from four major suppliers. Our research found that in over 80% of instances, the data used was inconsistent. We calculated that over the next five years, UK companies and suppliers will experience over £700 million profit erosion and £300 million in lost sales through poor product data.

The UK retail and food services sectors are highly competitive, fast-moving and rapidly changing. Companies are under pressure to innovate, including by introducing new ways for consumers to buy, providing extended product ranges and addressing increasing demands from consumers and legislators. The flow of good quality product information between trading partners is critical to these developments.

Poor quality data has a severe cost impact on companies in three areas:

- The cost of manual workarounds to source missing data and correct errors
- Administrative shrinkage costs in areas such as ordering and invoicing
- Lost consumer sales through shelf stock-outs

Without efficient processes to obtain, store, update and deliver accurate product data, companies will continue to suffer increased costs to patch up deficiencies in their data and will potentially suffer sanctions from legislators, pressure groups and consumers.

The issue of poor data quality is likely to get worse with increasing data demands in areas such as packaging, waste reduction and product sourcing. In addition, consumers are demanding better product information and labelling in areas such as nutrition, health and the environment. The number of product attributes required is expected to grow from a current figure of 66 to an average of 250 – a situation likely to make the management of product data even more challenging.

Industry best practice tells us that product data should be entered once, and in most cases, this should be by the brand owner. The time has arrived for UK industry to address the product data quality issue head on and reap the considerable benefits of Global Data Synchronisation (GDS).

Source: GS1 UK Data Crunch Report - www.gs1uk.org/datacrunchreport

What is GDS?

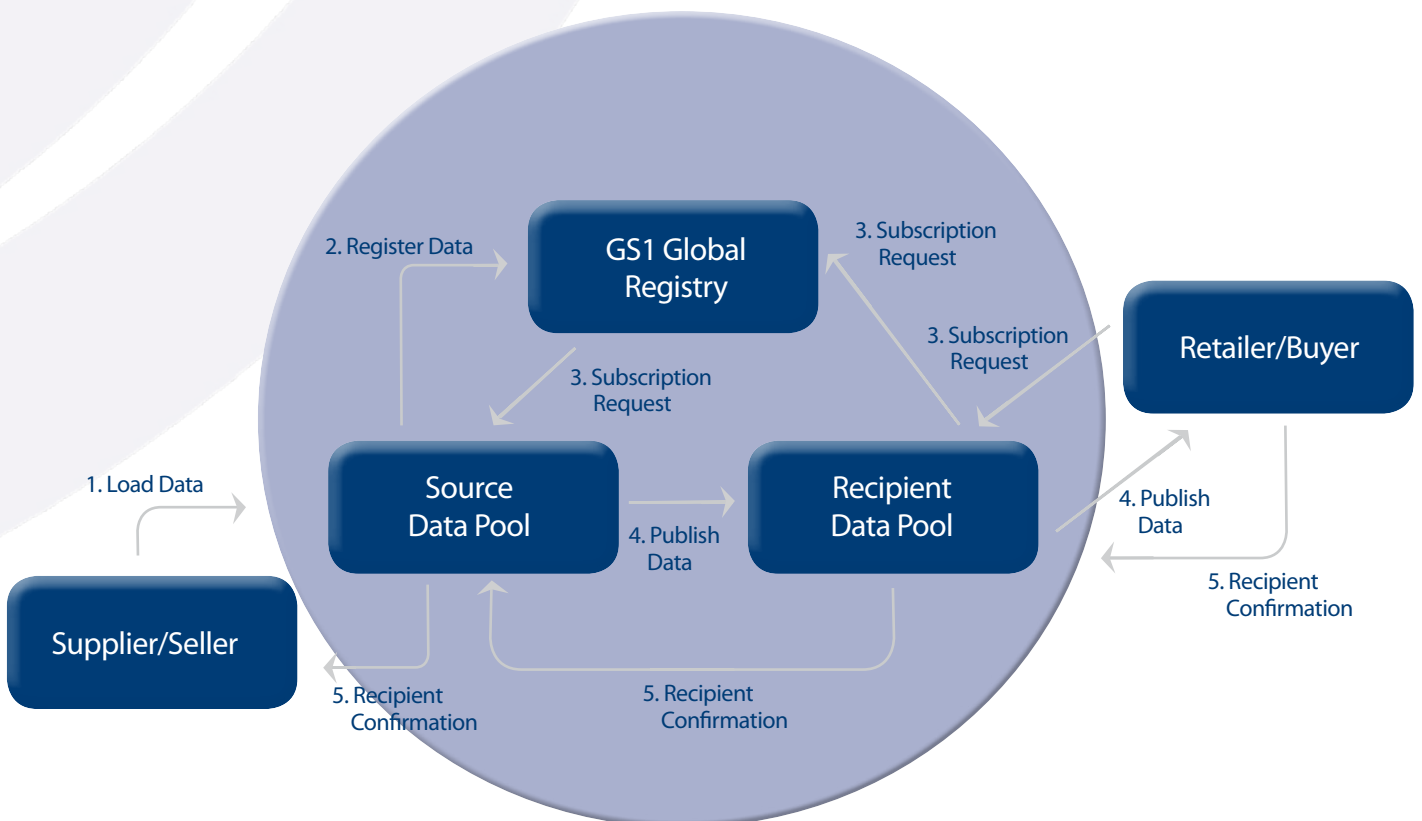
Global Data Synchronisation (GDS) is a system that enables trading partners to access and exchange product information securely in real time.

A supplier enters their product data into a data pool and this data is published through the Global Data Synchronisation Network (GDSN) to its trading partners. This removes the requirement to maintain multiple new line forms and proprietary customer systems. This process allows all trading partners to be sure they have the most up to date and accurate product data from the supplier.

When the supplier updates their product data the information is again published in real time to their trading partners, which enables them to again ensure the product data they hold is the most up to date and accurate.

In order to operate as part of the GDSN all data pools must be GDSN-certified. This ensures they meet the latest GS1 standards and communicate with other GDSN-certified data pools in a defined manner. This guarantees the performance, reliability and security of the entire network and all the product information stored within it.

The Global Data Synchronisation Network (GDSN)



“ As GDS operates to global standards, implementation of a GDSN-certified data pool will mean that suppliers only have to set up core data once for all of their customers. ”

Stefan Hesse, Finance Director, Makro UK

“ Increased speed to market and a more efficient supply chain are the main drivers for us moving to GDS. We will be able to pass on these benefits to our customers. ”

Robin Young, Commercial Director, Mitchells & Butlers

How does GDS work?

Products are accurately identified using a combination of globally unique GS1 identification keys and product information represented using standardised product attributes.

There are five functions that the network performs that enable trading partners to synchronise item, location and price data with each other:

1.

Load data:

The seller can register product and company information in its data pool.

2.

Register data:

A small subset of this data is sent to the GS1 Global Registry, a directory of all products held in the GDSN.

3.

Request subscription:

The buyer, through its own data pool, subscribes to receive a seller's information.

4.

Publish data:

The seller's data pool publishes the requested information to the buyer's data pool.

5.

Confirm and inform:

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

The benefits of GDS

GDS has significant benefits for all industries. Organisations that have implemented the technology have improved on shelf availability and made their logistics, accounting, customer service and inventory management substantially more efficient by reducing the number of supply chain disruptions with accurate product data.

GDS enables companies in all positions in the supply chain to:

- improve the quality of their master data
- simplify and enhance reporting, order tracking and planning
- make additions and changes to data simpler to manage
- improve cash flow
- reduce the quantity of complaints and disputes
- greatly improve the accuracy of orders, shipments and receiving
- have confidence in the information they're sending to and receiving from trading partners
- ensure the right product is the right place at the right time
- improve their green credentials through the use of accurate waste packaging data

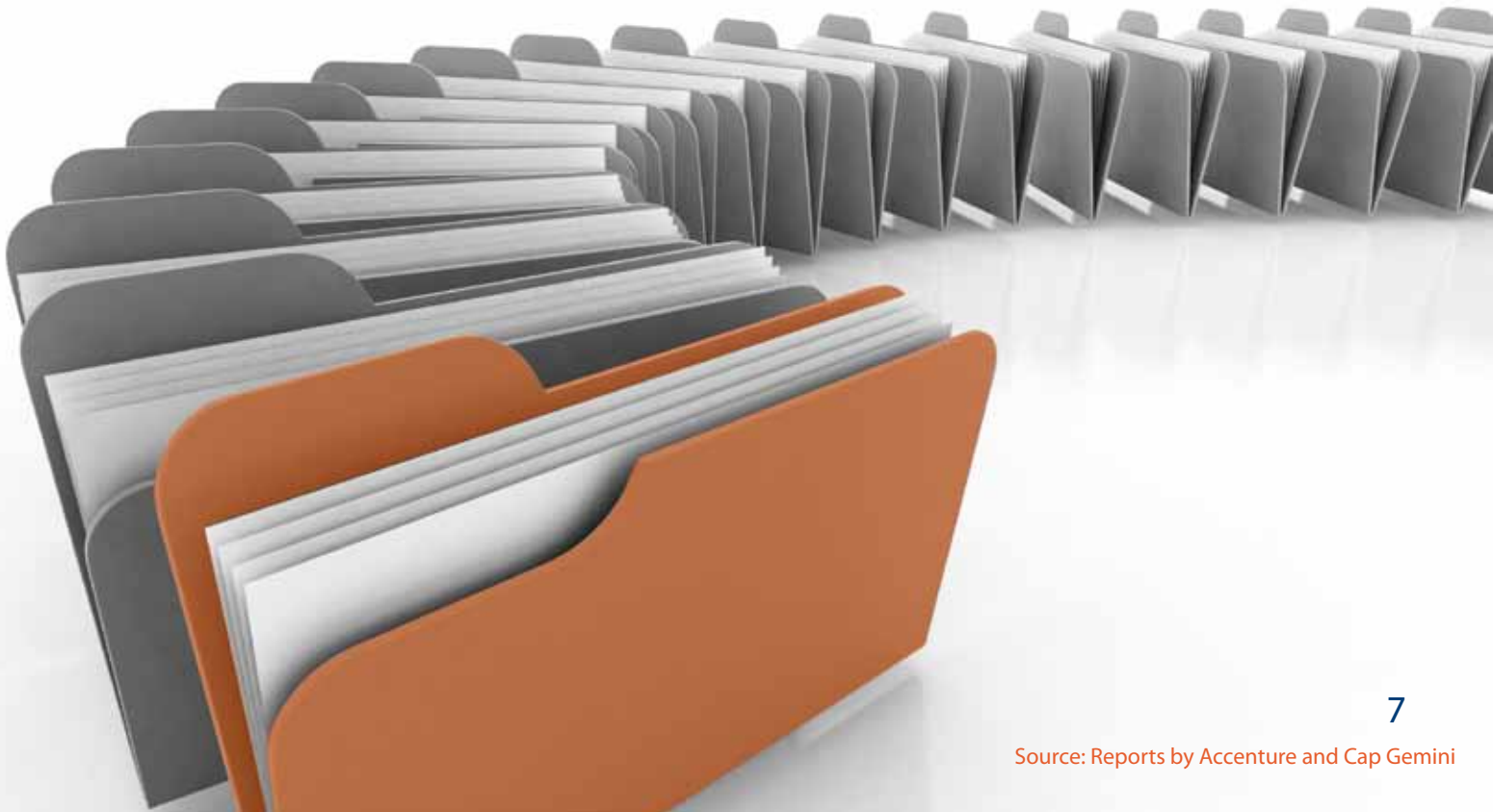
In our recent Data Crunch Report, we calculated that around 10% of shrinkage is caused by process failures attributed to poor data quality. The costs associated with shrinkage, work around processes and subsequent lost sales can largely be eliminated with GDS.

Manufacturers

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

Operators

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



“ Improving the quality and consistency of product data in the supply chain is essential to us and to our customers. GDS ensures we all have access to correct and complete data, saving everyone significant time and money through the avoidance of errors. ”

Eric Kirby, E-commerce Manager, Unilever UK Ltd

“ GDS gives you the opportunity to share and maintain accurate and up to date product data with your trading partners. The process works because everyone is looking at the same data. The value is in the reduced costs through the elimination of costly error checking and manual workarounds. ”

*Duncan Lennard, Managing Director, Commercial,
Brakes*

Product attributes - a growing problem

There are currently 200 GS1 standard attributes, but on average only 66 of them are used by suppliers and their customers. However, demand for attributes and usage is expected to increase in future as the need for additional product information increases. The problems of managing product data today are only going to increase in coming years.

Supply chain



There will be a growing demand for data around how a product is delivered to market, including handling instructions, traceability attributes and classification.

Health and wellness



Demand for data, such as nutritional information and product specification, will increase dramatically, driven by consumers and the growth of multi channel shopping.

Environment, packaging and legislation



Government, regulatory bodies and increasingly retailers will require timely information including regarding packaging waste, detailed tax information and carbon footprint.



The global landscape of GDS

Since the introduction of GDS, the number of global users has grown exponentially. Many of the largest organisations, from across industry, are now committed to GDS.



“ We began by looking at how we can revolutionise our data quality by the most effective means possible. GS1’s globally accepted data standards and the GDS network mean that we and our suppliers are using the same data. GS1 UK has given us the paradigm shift in data quality that we are looking for. ”

Mike Coupe, Trading Director, J Sainsbury plc

Industry next steps: Become part of the solution by working together

The need for better quality and improved management of data is significant and growing. The current approach of developing local processes and fixes to work around poor product data is no longer adequate and imposes substantial costs on all trading partners.

Greater collaboration is the key to tackling the issue of poor product data and trading partners would benefit if they moved to an industry standard solution in which master data is created once, used by all and maintained to a high level of accuracy and integrity. GDS is the answer to these requirements.

According to a recent GS1 benchmark, 30% of global trade is now transacted using GDS. In the US, Australian, Canadian, French, German and Dutch markets, GDS has become the accepted standard for the communication of product data.

For GDS to become the de facto way of working in the UK industry, major companies will need to move away from tactical solutions and embrace a new industry standard for managing product data where one, accurate, master source is used by all parties.

What next?

We can help you to make GDS a reality in your business and industry. Our retail and food service directors' groups meet regularly to discuss and agree the way forward. For more information please contact us today or visit www.gs1uk.org.

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Our reach globally

GS1 UK is part of an international organisation that has a global reach. We have a substantial presence in all the major and developing markets including the USA, Europe, Brazil, Russia, China and India – around 150 countries in total.

Our worldwide presence enables us to develop and coordinate the use of truly global standards, which means we can meet the demands of organisations whose supply chains stretch across national boundaries.

The most visible example of this, is the bar coding of grocery products. Items sold in UK, French, German and American supermarkets are all bar coded using the same system – the GS1 System.

Find out more

To learn more about our standards and activities, please visit our website, www.gs1uk.org.

Our global offices



GS1 Albania	GS1 Egypt	GS1 Kyrgyzstan	GS1 Romania
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GS1 Argentina	GS1 Estonia	GS1 Lebanon	GS1 Saudi Arabia
GS1 Armenia	GS1 Finland	GS1 Libya	GS1 Senegal
GS1 Australia	GS1 France	GS1 Lithuania	GS1 Serbia
GS1 Austria GmbH	GS1 Georgia	GS1 Macau	GS1 Singapore
GS1 Azerbaijan	GS1 Germany	GS1 Macedonia	GS1 Slovakia
GS1 Bahrain	GS1 Ghana	GS1 Malaysia	GS1 Slovenia
GS1 Belarus	GS1 Guatemala	GS1 Malta	GS1 South Africa
GS1 Belgium and Luxemburg	GS1 Honduras	GS1 Mauritius	GS1 Spain
GS1 Bolivia	GS1 Hong Kong	GS1 Mexico	GS1 Sri Lanka
GS1 Bosnia - Herzegovina	GS1 Hungary	GS1 Moldova	GS1 Sweden
GS1 Brazil	GS1 Iceland	GS1 Mongolia	GS1 Switzerland
GS1 Bulgaria	GS1 India	GS1 Montenegro	GS1 Syria
GS1 Cambodia	GS1 Indonesia	GS1 Morocco	GS1 Taiwan
GS1 Canada	GS1 Iran	GS1 Netherlands	GS1 Tajikistan
GS1 Chile	GS1 Ireland	GS1 New Zealand	GS1 Thailand
GS1 China	GS1 Israel	GS1 Nicaragua	GS1 Tunisia
GS1 Colombia	GS1 Italy	GS1 Nigeria	GS1 Turkey
GS1 Costa Rica	GS1 Ivory Coast	GS1 Norway	GS1 UK
GS1 Croatia	GS1 Japan	GS1 Pakistan	GS1 Ukraine
GS1 Cuba	GS1 Jordan	GS1 Panama	GS1 United Arab Emirates
GS1 Cyprus	GS1 Kazakhstan	GS1 Paraguay	GS1 Uruguay
GS1 Czech Republic	GS1 Kenya	GS1 Peru	GS1 US
GS1 Denmark	GS1 Korea	GS1 Philippines	GS1 Uzbekistan
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