GS1 Industry and Standards Event
3 – 7 October 2016 – Brussels

Transforming business together

Session: GS1 B2C Data Strategy & the GS1 TrustMark
Time: Monday 3 October, 2016 (12:30-13:45)

Who may attend: Open for all
Speaker(s): Mike Wehrs and Cameron Green (GS1 GO)
Two “To do’s”, please..

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GS1 Global Office Update
Data Strategy and the GS1 Cloud

Michael Wehrs
October 2016
Data Strategy Project Background

• Mike McNamara launched a steering committee to provide guidance around GS1 Source and data strategy in general at the General Assembly Mexico City 2016

• Members were:

<table>
<thead>
<tr>
<th>Mike McNamara – Target (Chairman)</th>
<th>Bruno Aceto, GS1 Italy (Chair GS1 Europe)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renaud de Barbuat, Carrefour</td>
<td>Bob Carpenter, GS1 US</td>
</tr>
<tr>
<td>Eric Tholome, Google</td>
<td>Jörg Pretzel, GS1 Germany</td>
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<tr>
<td>Philippe Lambotte, Mattel</td>
<td>Maria Palazzolo, GS1 Australia</td>
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<tr>
<td>Chris Resweber, JMSmucker</td>
<td>Miguel Lopera, GS1 GO</td>
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<td>Jean-Marc Kloppenstein, Nestlé</td>
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<tr>
<td>Barron Witherspoon, P&amp;G</td>
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<tr>
<td>Stephan Fuesti-Molnar, Henkel</td>
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<tr>
<td>Cameron Geiger, WalMart</td>
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</table>

• The outcome of the meeting was presented at the GA
GS1 Cloud Steering Committee

**Purpose**
- Is there a need for GS1 Source?
- If so, how do we create it?

**Outcomes**
- The case for GS1 Source is compelling from consumer, retailer and brand perspectives. This is something the industry wants.
- There are two significant departures from current GS1 Source thinking:
  - Trading Partners (retailers and search engines etc.) are the key consuming stakeholders.
  - Access controls are a vital component of the solution.
- Brand owners unanimously rejected the concept of curated data.
- GS1 has a role to play in creating, operating and populating the Source; the market is unlikely to build a controlled access solution; GS1 has the relationships and ground force to populate the Source.
The participants unanimously agreed the following solution features:
- A single, global platform
- All data to be authorized by the brand owners
- Data attributes will be segmented to allow differential access
- The solution must comply with current internet architecture practice
Data Services Cloud

Respond to any GTIN or set of GTIN inquiries from any Global Market with a response of up to 13 trusted attributes per GTIN

The unique and sustainable mission of this service is to include all GTIN’s in the World

The APAC Proof of Concept will demonstrate that 7 MOs came together with GO to demonstrate the power of this approach
Individual GS1 MOs mobile apps access the data via one standard API

~60 million from 10+
GS1 Asia Pacific member office
## Data load status

<table>
<thead>
<tr>
<th>MO</th>
<th># of GTIN in national catalogue</th>
<th>Provided sample Data</th>
<th>Data loaded for POC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AU 950k</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>2</td>
<td>CN 50m</td>
<td>Working with GO in handling very volume of data upload</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>HK 5m</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>4</td>
<td>ID 500k</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>5</td>
<td>IN 1m</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>6</td>
<td>MY 7k</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>7</td>
<td>SG 15k</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>8</td>
<td>TH 10k</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>9</td>
<td>TW TBC</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>10</td>
<td>VN 15k</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Total ~60m</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Initially this new architecture will replace GS1 Source. If subsequent capabilities are requested and approved, they will transform the technical underpinning for GDSN, GEPIR and other GS1 Services into a unified modern design, leveraging the data within GDSN and other trusted sources. If developed to this level of service unification, the GS1 Cloud will house all GS1 related product data making it available, with access control, as One Platform making it the largest source of trusted product data in the world.

There will initially be 5 main benefits:
1. Brand owners and their delegates will be able to provide basic product information to consumers with access controls and high data quality
2. Provide a next step in key authentication; from Company (GCP) to Product (GTIN) authentication
3. Simplify interoperability and messaging cerography
4. Ensure faster access to data at the global level
5. Improve MOs, certified DPs and solution providers to provide local market through value added services that are too complex and expensive to develop today
To start creating the GS1 Cloud with basic product information (open to all parties) optional product information (access restricted by brand owners) and attributes required for GTIN validation and issuance:

1. Basic Product Information: Includes the GTIN and a recommended minimum of 13 data attributes (product name, picture, manufacturer, etc.) that would be open to all parties agreeing to a Terms of Use agreement.

2. Optional Consumer Product Information: Includes attributes that are included on the label (e.g. nutritional information, allergen information) or are demanded by regulators to be publicly available and will require additional access rights to utilize.

3. GTIN Validation Information: Advancing Key Validator service to function at the GTIN level

4. Individual GTIN Issuance: A service for MO’s as a turnkey manner of providing individual or small numbers of GTIN’s to their members
The source of data for the launch will be:

- (1) GDSN (10 Million customer facing GTINs)
- (2) MO’s GEPIR catalogues (30 Million GTINs) and
- (3) other MOs and Data Aggregators non-GDSN catalogues (50 Million GTINs)
- (4) Attributes provided during GTIN Issuance
GS1 Services Today – Phase 0

40K trading partners

Internet Application providers who sign Terms of Use Policy

Internet Application Providers (approved or not) and GS1 members are making use of these systems

30+ Data Pools

6 Data Aggregators

25 MO’s

112 MO’s

GS1 MO’s and IAP’s or MO Apps

GDSN Feature Set Product Info for known trading partners

GS1 Source Feature Set Product Info for Consumers

GLNS Feature Set Location Info for B2B

GEPIR Feature Set Customer Info for MO’s and Public

Global Registry, Indexes, and Directories

Data for GS1 Source

Data for GLNS

Data for GEPIR

Data Catalog Feature Set Product Info for known users

Data for Catalogs

Local MO’s Registries

Infrastructure for GDSN

Data for GS1 Source
GS1 Services – Initial Transition

40K trading partners

30+ Data Pools

GS1 Authentication and DQ Service

GDSN Feature Set
Product Info for known trading partners

GS1 Source Feature Set
Product Info for Consumers

6 Data Aggregators

GLNS Feature Set
Location Info for B2B

25 MO’s

Data for GLNS

112 MO’s

Data for GEPIR

GS1 MO’s and IAP’s or MO Apps

Key Authentication Service

All MOs and GS1 Members

Approx 50 MOs

Data for GEPIR

Data for GLNS

GS1 Cloud
Centralized Data Storage

Global Registry, Index and Directories

The Global Language of Business

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GS1 Trustmark Deployment Update

Cameron Green
October 2016
What is the GS1 Trustmark?

• A visual symbol that differentiates product information coming from brand-owners from questionably acquired product information that comes from other sources
• Used for data coming from GS1 Source/GDSN
  - Will also apply to the GS1 Data Services Cloud (if approved)
• Visible in mobile apps and on websites

Example of a Trustmark on a mobile page showing product information
How do SmartLabel™ and the GS1 Trustmark Differ?

• SmartLabel™ establishes a brand’s participation in the programme and sets an expectation for a common experience for the customer.
  - The on package icon itself means that the brand owner will present the data in a SmartLabel™ compliant manner online.

• The GS1 Trustmark is a discreet digital symbol found adjacent to data wherever the consumer is digitally shopping (mobile app, ecommerce website, etc.) “certifying” information as accurate according to the brand-owner.

Other “trusted data” symbols may exist and should be identified

Spain example on Pepsi
GS1 Trustmark elements

Brief text explanation*. Learn more.

1. Symbols tested
2. Text
3. Link to more detailed explanation

* Recommendation is this field will be “information from the brand owner”

Digital only usage: Symbol may appear alone or with text
The “Learn more” text would link to a consumer-facing webpage with more information about the GS1 Trustmark.

Example of GS1 Trustmark webpage

The GS1 trustmark ensures that you know where the product information you see on websites and mobile apps comes from.

What does the GS1 trustmark actually mean? When you see the GS1 trustmark next to product information, it simply means that the information has been provided by the company that markets the product – the “brand-owner”.

Who is GS1? We are a not for profit international association that provides standards for efficient business communications. Our best known standard is the barcode. Find out more at www.gs1.org.

What is GS1’s role in relation to the GS1 trustmark? We do not verify the product information for safety, accuracy or completeness. The person best placed to do this is the brand-owner. Through standards, certification procedures and agreements on the use of our GS1 trustmark, we make it possible for brand-owners to communicate information about their products online in a way that ensures that this information is not altered in any way when it reaches the consumer.
What happens when consumers see it?

Example of a consumer interfacing with the GS1 TrustMark
Consumer research and global pilot

Consumer research objectives:
1. Understand symbol consumer’s prefer
2. Qualify sentiment towards Trustmarks
3. Refine the value proposition
4. Confirm additional testing for pilot

*Target Completion: OCT 2016*

Global pilot milestones:
1. Review pilot documentation with interested aggregators
2. Call for participation to MOs and Aggregator Community
3. Country pilots begin with help of GS1 GO and MOs
4. Aligning completion dates with Data Strategy project
5. Learnings collected and global pilot report

*Target Completion: JUNE 2017*
Global GS1 Trustmark pilot

The objectives of the pilot are to establish:

• Value propositions for consumers and businesses
• Best practices for mobile/website developers
• Best practices for 3rd parties and aggregation services
• Guidance for GS1 GO to maintain conformance

What are the benefits of participating in the pilot?

By participating in the pilot your company will gain the first-mover advantage in this exciting consumer transparency area covering:

• Importance and value of trusted product data for consumers
• Proof for brand-owners that consumers make buying decisions using trusted product data

How to participate

Participating in the pilot is easy. Simply follow the steps below:

• Indicate your interest in participating by sending an email to Cameron.Green@gs1.org with Trustmark Pilot in the subject line
QUESTIONS???????
THANK YOU FOR RATING THIS SESSION
Cameron Green (GS1 GO)
Senior Director B2C
+1 609-557-4570
Cameron.green@gs1.org

Mike Wehrs (GS1 GO)
Head of Data Products & Services
+1 425-829-3227
Mike.Wehrs@gs1.org
APPENDIX

General Assembly (Official Business) Meeting

Wednesday, 18 May 2016

St Regis Hotel, Mexico City, Mexico
08h30 to 12h30
Objective of the Data Strategy meeting

1. Is there a need for GS1 Source?

2. If so, how do we create it?
Attendees

- **Retailers:**
  - Carrefour
  - Target
  - Wal-Mart
  - Google

- **Brand Owners**
  - P&G
  - Nestle
  - Henkel
  - JM Smucker
  - Mattel

- **GS1 US, GS1 Germany, GS1 Australia, GS1 Italy, GS1 GO**
Questions to resolve

1. Support of Manufacturers and Retailers to a GS1 data repository

2. How to progress GS1 Source (lack of data):
   a. Misuse of data
   b. Brand Liability

3. Confusion amongst the different GS1 Products (GDSN, GS1 Source, GEPIR)
Support of Manufacturers and Retailers

All Users fully supported GS1 to provide a global service of brand authorized product information

1. No one provides the service today and no one will do it
2. It will provide great value to manufacturers and retailers:
   a. Consumer Transparency
   b. Efficiencies
   c. Key authentication
## Issue: Misuse of data

Brand owners are concerned about the misuse of product information by third parties

<table>
<thead>
<tr>
<th>Untrusted Recipients</th>
<th>OPEN</th>
<th>RESTRICTED (OPTIONAL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trusted Recipients (Trading Partners)</td>
<td>OPEN</td>
<td>OPEN</td>
</tr>
<tr>
<td>Core Data</td>
<td>Extended Data</td>
<td></td>
</tr>
</tbody>
</table>
Issue: Liability

• Access control and terms of use will overcome many of the concerns surrounding potential liabilities
GS1 Data Strategy: Users’ Request

• Develop a Global Platform that will be fed by all GDSN attributes and other GS1 product sources (GEPIR) to achieve:
  ✔ Easier access for retailers and search engines
  ✔ Easier use by non-GDSN users

• Access Control will be a core feature to avoid misuse

• Brand Authorized data only (No curated data)

• There will be segmented Attributes, some available to trusted partners and others for open access
Next Steps

1. Get support from GS1 stakeholders (MOs, MB, DE Board, etc.)

2. Develop governance and business model

3. Conceptual design of the solution by the end of June 2016

4. Data migration strategy