GS1 Industry & Standards Event 2019
9-13 September 2019 – Lisbon, Portugal
*Transforming business together*

Session: **Innovation Interest Group**
Time: 12 September, 8:30-10:30

Who may attend: Everyone!

Session Leads: Kevin Stark
Anti-trust caution

• GS1 operates under the GS1 anti-trust caution. Strict compliance with anti-trust laws is and always has been the policy of GS1.
• The best way to avoid problems is to remember that the purpose of the group is to enhance the ability of all industry members to compete more efficiently.
• This means:
  - There shall be no discussion of prices, allocation of customers, or products, boycotts, refusals to deal, or market share.
  - If any participant believes the group is drifting toward impermissible discussion, the topic shall be tabled until the opinion of counsel can be obtained.
• The full anti-trust caution is available via the link below, if you would like to read it in its entirety: http://www.gs1.org/gs1-anti-trust-caution.
WiFi internet access

- Select network “Sheraton Lisboa” and connect
- Password:  **GS1events**
Format for today

• Typical Innovation Interest Group – sharing amongst MOs
  - Projects
  - Activities
  - Innovation practices
  - In-country trends
• GO update – highlighting interesting activities, ways of using Trend Research at MOs
MOs Presenting Today

- GS1 Brasil: Luiz Renato Martins Costa
- GS1 France: Valérie Mazzoni
- GS1 Ireland: Tim Daly
- GS1 Japan: Koji Asano
- GS1 Switzerland: Domenic Schneider
- GS1 Sweden: Staffan Olsson
## Relevance of business trends across the value chain

<table>
<thead>
<tr>
<th>Prioritised business trends</th>
<th>Data security &amp; privacy</th>
<th>Traceability</th>
<th>Sustainability</th>
<th>On-demand logistics &amp; services</th>
<th>Automation &amp; smart everything</th>
<th>Empowered consumer</th>
<th>Mass customisation</th>
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</thead>
<tbody>
<tr>
<td>Manufacture reached</td>
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<td>Medium</td>
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<td>Medium</td>
</tr>
</tbody>
</table>

**Technology enablers relevant to business trends**

- Data security & privacy
- Traceability
- Sustainability
- On-demand logistics & services
- Automation & smart everything
- Empowered consumer
- Mass customisation

### Most relevant

- IoT, sensors & biometrics
- AI (Artificial Intelligence)
- Open, structured & linked data
- Blockchain & distributed data
- Computer vision
- Voice recognition
- Robotics
- Augmented, virtual & mixed reality

### Least relevant

- IoT, sensors & biometrics
- AI (Artificial Intelligence)
- Open, structured & linked data
- Blockchain & distributed data
- Computer vision
- Voice recognition
- Robotics
- Augmented, virtual & mixed reality

Trend Research Report

• Discussing how people are using the report to engage their communities
• Additional slides to help in presenting on these topics
• Let me know if you want to contribute next year!
Continued traction/interest at MOs


GS1 Sweden – using the Trend Research to support corporate strategy work for 2020-2022
Continued traction/interest at MOs

GS1 Slovenia – highlighting Trend Research in their recent newsletter and on their website.

GS1 Jordan – highlighting disruptive trends in their newsletter.
Other interesting ways of engaging the community

• GS1 US Startup Lab Competition

Join us in congratulating @realLexset, Simplista, and Locai for their first, second and third place wins in our inaugural #StartupLab19 Pitch Competition @GS1Connect. ow.ly/ylqc30oYSFr #GS1Connect19
GS1 BelgiLux - Innovation Café

= Informal gathering around a GS1 Innovation area

- Members and non-members
- Minimum of 2 times a year
- Setting: Café

Contact: Jan Merckx
GS1 BelgiLux - Innovation Café

- **Introduction Innovation and GS1**
  Vincent De Hertogh - President – GS1 Belgilux

- **Existing data standards and the use of blockchain in trusted supply chains**
  Jan Merckx – GS1 Belgilux

- **Applying blockchain to ease and digitise the exchange of pallets**
  Ralph Tröger – GS1 Germany

- **Food Trust: the IBM perspective**
  Walter Stiers – IBM

- **Open discussion: the myths about blockchain technology**

- **Networking Reception**
GS1 BelgiLux - *Innovation Café*

**Strong:**
- Leverage WW GS1 cases

**Next**
- Innovation Newsletter
- AI for Data Quality
  link to *Hackaton* or *MeetUp*
Auto-ID Labs

- MIT, Keio U., Fudan U., U. of Cambridge, KAIST, ETH Zürich/U. of St. Gallen
- 4-page summary of their 2018-2019 research projects
- Self-checkout, digital receipts, Industrial IoT, Voice Commerce, EPCIS Choreography, Blockchain/EPCIS/Traceability, Smart City, RFID tag advanced research,…
- Full end-of-year reports coming soon!
- See more at:
  - http://mozone.gs1.org/innovation/
GS1 Brazil
Luiz Renato Martins Costa
MO Innovation Update

Legacy Of Waters Project

The challenge: identify the native plants species of the brazilian atlantic forest and to provide all traceability information from the plant nursery to the final planting.

It is globally innovative as it identifies and tracks native plants, something unheard of in GS1. Moreover, in the environmental aspect, there is no knowledge of similar initiatives that have this applicability and this innovation bias.

Share your accomplishments! What is a success that you had?

- The project began with the suggestion to identify, through the GS1 System, the species of the Brazilian rainforest and then evolved into a traceability Solution.
- It is **globally innovative** as it identifies and tracks native plants.
- 100% fully collaborative project (no charge), with solution providers participating with GS1

For the implementation of automation, GS1 global identification and service standards have been adopted. Identification of the species is done with the GTIN (Global Trade Item Number) and the location of the matrices with application of GLN (Global Location Number), embedded in a QR Code.

- Phase 1 - Initially with proprietary identification
- **Phase 2 - Digital Link Implementation!!**

The Nursery Traceability Diagnosis was also applied to assess the correct use of GS1 standards. For this, the Global Traceability Standard (GTS) was applied.
MO Innovation Update
Legacy Of Waters Project

MO:
GS1 Brasil

Contact:
Luiz Costa

Date:
September 2019

pqr.io/gtin/7898653241207/ser/APE3Y2FAYST1RRY3
MO Innovation Update

Legacy Of Waters Project

GS1 Brasil

Contact: Luiz Costa

Date: September 2019

Throughout the years GS1 Brasil
MO Innovation Update

GS1 France Innovation Team

Ons Sassi, PhD
Innovation Project Mgr

Yacine Bouallouche, PhD
Innovation Project Mgr

Magali Granger
Innovation Project Mgr

Stéphane Cren
Head of Innovation

Organize the watch out of usages, markets, technologies

Build prototypes & drive PoCs with users (pioneers)

Explore new markets, new business models and ways of working

Develop new concepts

MO: GS1 France
Contact: Innovation Team
Date: Sept 19 - Lisbon
Co-create, experiment standards & services of tomorrow for the benefit of all

Product Information

**New Digital Assets**: publishing of a white paper on the challenges of the Voice Commerce in Retail

**PIK (Picture is Key)**: Experiment the use of meta-data in images as a trigger to product data/information

**ProductChain**: experiment the use of Blockchain to establish & manage a wide distributed network of product data & sources

https://www.ecommerce-nation.fr/prenez-le-chemin-du-commerce-vocal/
Co-create, experiment standards & services of tomorrow for the benefit of all

**Collaborative Logistics**

Co-conception of **standardized APIs** for Transport & Logistics to optimize Deliveries Slotting » & « Goods Tracking »

Co-creation of a **collaborative registry of logistics locations** to improve the transport & delivery flows

Tested on blockchain

« Physical Internet » Research Chair
Co-create, experiment standards & services of tomorrow for the benefit of all

**Traceability**

Setup of a **collaborative traceability demonstration platform**. Help companies to facilitate the deployment of traceability solutions and understand the benefits to do it with GS1 standards

**Digital Identities**

Production of a **study on digital identities** in order to create a vision for GS1 in this space

**« Scalechain » Initiative**

Build a common vision of the conditions needed **to scale up and accelerate the adoption of Blockchain technology**. Define the needs for standards to ensure its interoperability
MO Innovation Update

1. Supply chain mapping framework development in conjunction with a leading Supply Chain university and Major Irish poultry producer. With the aim of identifying their process and mapping GS1 identifiers to it.

2. Infant feed formula project and rollout with The National Childrens hospital in Ireland (short rough video sent in link)

3. Design thinking being implemented in GS1 Ireland, engaging with members. Started with our Barcode manager tool and we hope to push it out to more projects over the coming months, with regular meetings and interaction with members driving real business change in the members interest.

4. We have recently implemented Zymplify software for multichannel marketing automation. Which is helping us to organise our sales funnels, marketing campaigns, social media campaigns and PPC all together in one place and bring structure to the way we reach and speak to our members.

MO: GS1 Ireland
Contact: Tim Daly
Date: Sept 2019
1. **RFID in Healthcare Industry in Japan**
   
   **I.** AMDD announced Recommendation of using GS1 Standards for RFID in May 2019.
   - GS1 Japan has supported AMDD to make this consensus and has developed guidance.
   
   **II.** AMDD Recommendation is to use:
   - EPC/RFID tags with UDI data encoded in compliance with GS1 Tag Data Standard.
     - GTIN and Serial# into EPC memory bank with SGTIN-96 or SGTIN-198,
     - Lot# and Expiry date into USER memory bank with **Packed Objects**
   
   **III.** Packed Objects is so complicated!
   - Recommend to use encode/decode software library which is formerly provided by Ken Traub but now licensed by GS1.
2. **100 Billion RFID Tags Project by METI** (Ministry of Economy and Trade Industry)

I. **Background:**
   - **Shortage of labors** in Japan,
   - **Online technology** changes consumer shopping behavior,
   - More productive, **efficient supply-chain** needed, - Frequent Deliveries, Food Waste, etc -

II. RFID pilot was conducted through FY2016 – FY2018.
   - FY2016: Does RFID work in convenience stores? - Self-Checkout, Inventory Taking -
   - FY2017: What is the benefit for manufacturers? - Data Sharing with EPCIS -
   - FY2018: What is the benefit for consumers? - Dynamic Pricing, Personalized Ads, RFID in Home -

III. Through this project, Joint Declaration was made by convenience store operators, and by Japan Association of Chain Drug Stores.
Starting position

- Analysis of the services offered by GS1 Switzerland
- Interview with 4 stakeholders
320 companies answered a survey on their actual use of GS1 and, for example, on the expected solutions.
MO Survey

MO: GS1 Switzerland
Contact: Domenic Schneider
Date: September 2019

• Survey sent to all MO's
• 42 MO's answered questions like: "Which solutions will you launch/introduce within the next 2-3 years?"
In which areas should GS1 Global engage increasingly more resources in the coming years?
How our members work with GS1 today

• For each need, a different solution must be subscribed
• Different accessibility
• Inconsistent interfaces
• Differences in CI/CD
• Some solutions are offered by GS1, others must be ordered from private companies.
How our members could work with GS1 tomorrow

- One customer has a single access to GS1
- All information can be transmitted or received via a connection to GS1
- The customer pays for what he uses

MO: GS1 Switzerland
Contact: Domenic Schneider
Date: September 2019
Next steps

- **Analysis**: 6 Apr 2016
  - Master Thesis
  - New Services of GS1
  - New general conditions

- **Concept**: 31 Dez 2019
  - Goal
  - Target market
  - Resources

- **Project**: 31 Aug 2020
  - Development
  - Integration
  - Testing

- **Go Live**: 1 Sep 2020
  - Information Communication
  - Customer accompaniment
  - and optimization

- **Outcome Achievements Learnings**: 15 Dez 2020

© GS1 2019
Thank you very much

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www.trustbox.swiss
Strategic Business Development and Innovation @GS1 Sweden

Staffan Olsson
Strategic Business Development & Innovation

The location

The office

The people
Linda →
← Staffan
Current activities - highlights

• Currently focusing on business development
  - Partner with various industry associations to
    • Target small suppliers on master data
    • Create awareness on GS1 traceability in apparel / GM
  - Pilot cooperation with certification associations/industry
  - Exploring accelerator investment and sponsorship
  - GS1 startup partnership programs i.e. master data sandbox

• Additional innovation activities
  - Digital receipts and targeted consumer recalls
  - Sustainability metrics for products – facilitate suppliers’ creation of their products’ sustainability figures
  - Data Quality based on machine learning – early discussions
Questions?

Koji, Luiz, Domenic, Valérie, Staffan, Kevin
Thank you!

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