eMagazine

The Latest Updates from the End-to-End Value Chain and Product Data Coalition

The Consumer Goods
FORUM

End-to-End
Value Chain

Welcome to the first public edition of the E2E eMagazine, which is designed to be a rolling release of all our activities.

Dear Reader,

This is the first public edition of the E2E eMagazine. It is designed to be a rolling release with **monthly updates here and there**. This means that each issue will pretty much look like its predecessor but will include minor updates regarding figures, stats and added news.

There is a lot of room left to improve on content and layout. Over time **we will add interviews, tutorials and best-practice sharing**. At the end of each issue you find the fully-fledged glossary of all things related to End-to-End Value Chain. This part will change very slowly. We select those activities where we believe we made significant progress on and put a copy of the information contained in the glossary at the front end of the eMagazine. This is the part we call the Progress Report, and this is also the source for the **CGF CEO Board of Directors' Pre-Reads. We will highlight the most important keywords and progress there,** and also our asks and challenges if applicable. **The KPI section will be especially important**, and help us not only highlight progress as such, but also if the progress is positive, pointing in the right direction and closing in on the original goal.

Thank you for following our eMagazine!

Best regards,

Rudy

Ruediger Hagedorn

Director, End-to-End Value Chain
The Consumer Goods Forum

Steering Committee

CoA Product Data

CGF Member List

ID Ubiquity

Verified by GS1

Global Data Model

Pilots

E2E Progress Report

DataPorts

Data Quality Rules

E2E Modeling

Excess Packaging

Transportation

FP - True-Code

Share Groups

IT

Supply Chain

Study Tour

Induction Programme

Blog Posts

Podcasts

Videos

New Tools

MicroChallenge

SpringBoards

Learning Series

New Media

Incubation

Move Forward

Progress Report

Program | Induction Induction Program | Induction Program | Induction Program | Induction Program | Induction Program Induction Program | Induction Program | Induction Program | Induction Program | Induction Program | Induction gram | Induction Program | Induction Program | Induction Program | Induction Program | Induction Program Program | Induction Program | Induction Program | Induction Program | Induction Program Induction Induction Program | Induction Program | Induction Program | Induction Program | Induction Program Program Induction

Progress highlights

15
Blog Posts

2020 INDUCTION PROGRAMME

9
Podcasts

9
Learning Series

5
SpringBoard events

2
Physical

3
Virtual

Induction Programme

In 2020, we have so far published 15 blog posts, 9 podcasts, 9 Learning Series and organised 5 SpringBoard events (two physical and three virtual).

Companies who have contributed content include IceCreamLabs, Capgemini, SyncForce, Skuchain, IBM, SourceMap, Advantage Group International, Veeva, Recall Infolink/SummitVentures LLC.

In 2020, we have so far published 15 blog posts, 9 podcasts, 9 Learning Series and organised 5 SpringBoard events (two physical and three virtual)

4

Induction Programme
Blog Posts

Our most recent blog posts include:

COVID-19 Causes a Stutter Step in Sustainability Progress, What's Next? Advantage Group International
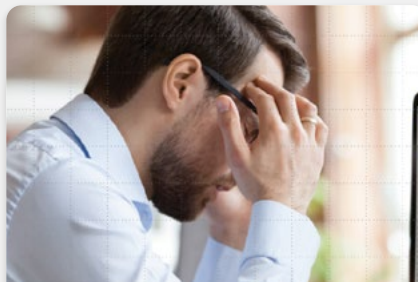
Increased Profits Driving Dynamic Pricing Adoption, Quicklizard

Sustainable Supply Chain is the Only Way Forward: an Insight into the Iso Modular GS1 Transport Box and Sustainable Point of Sale Materials, P&G

Achieving a More Responsive Supply Chain: Lessons from COVID-19, Skuchain

More Blog Posts

Induction Programme
Podcasts

Our most recent podcasts are:

Supply Chain Transparency, Reimagined

Responsive Supply Chains, Skuchain

COVID-19 and Its Impact On Consumer Goods Companies, IBM

End-to-End Value Chain Mapping in a Global Crisis, Sourcemap Inc.

More Podcasts

6

Induction Programme
Videos

Watch our latest video to find out more about our work:

**End-to-End Value Chain |
Close-up with Ruediger Hagedorn**

(>)

More Videos   (>)

SPRINGBOARD

19th JANUARY 2021

RUNNING ON **CGF LEAPFROG ENGINE**

DIGITAL MANUFACTURING & OPERATIONS

Share, inspire and exchange thoughts!

Upcoming Events...

Intelligent Products & Platforms
February 2021

Design to Margin
March 2021

SPRINGBOARD

The Consumer Goods FORUM

End-to-End Value Chain

accenture

Follow up on MONO to get the dates soon and apply for a seat

Thank you to our Premium SpringBoard Sponsors

accenture

Capgemini

CI&T

IBM.

icecreamlabs

(intel)

greenfence

KPMG

logyca

ORACLE

PA

SAP

selerant
create. comply. connect.

SIM
Supply chain
Information
Management

StiboSystems

SyncForce+

TeakOrigin

VTEX

E2E Project Lifecycle Management
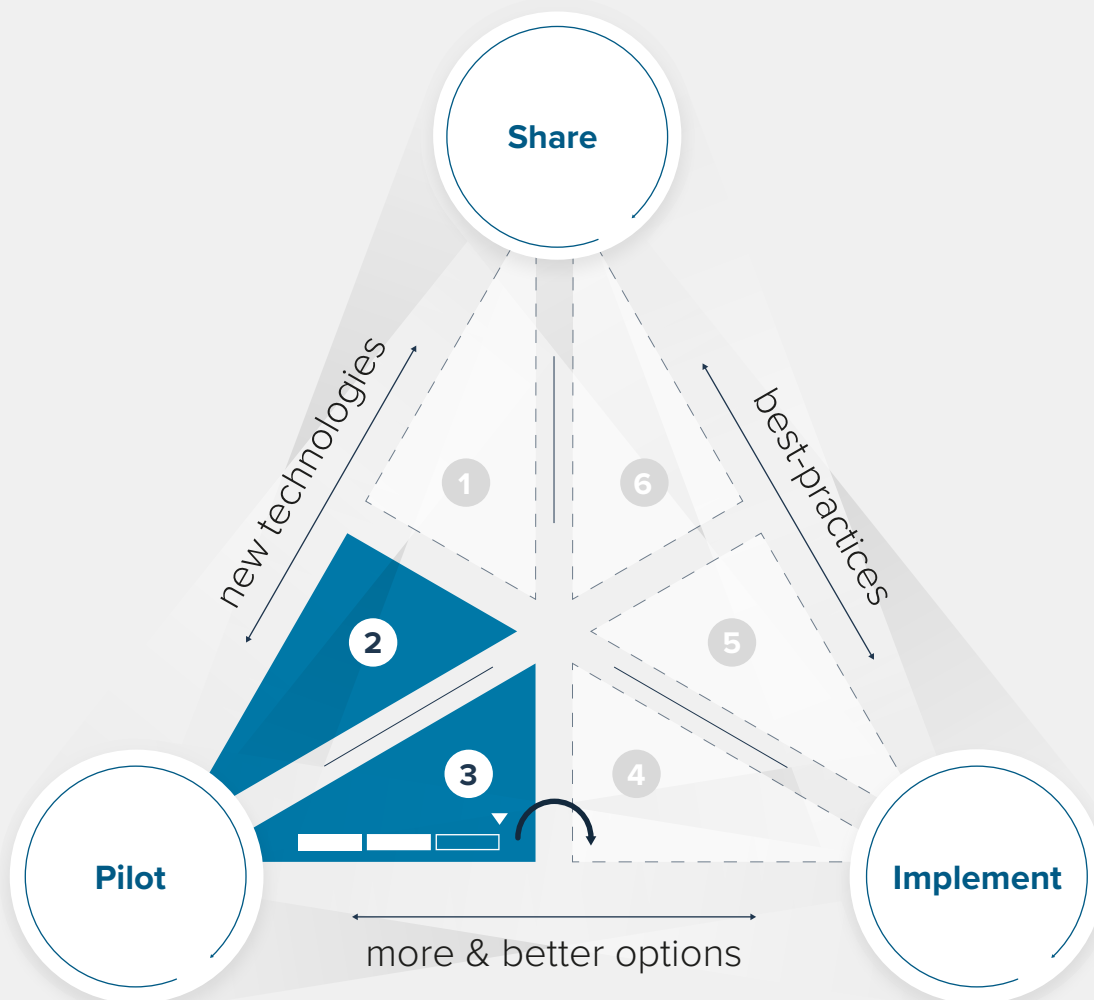
The E2E Landscape has several entry points into the Tri-Angle we call "collaboration areas". These include data standards, value networks and physical logistics.

Each segment is divided into 3 Sprints (equivalent to time mesures). This is valid for all pilots. Sprints bring you closer towards the next action point as you move along the delivery roadmap, as shown in the figure.

Example: True-Code Facility Passport works in the collaboration area of Data standards as it pilots a new data set to support decision-making in companies. Thereby it creates more and better options for companies to choose from, which positions it in Segment 3. The pilot is now entering the 3rd Sprint which means its development towards implementation is advanced and will soon become a Segment 4 activity. (see arrow).
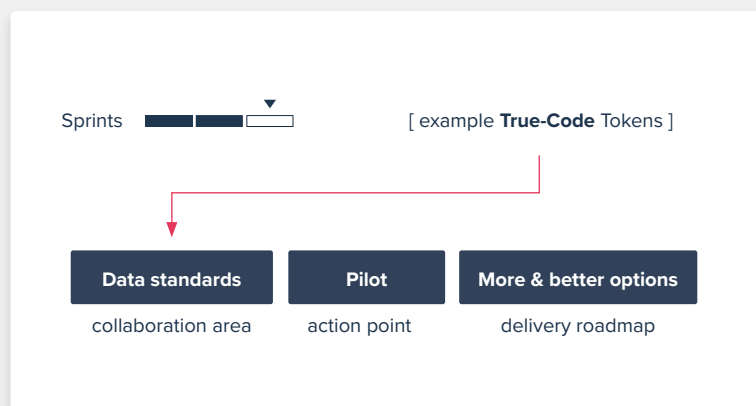
Act. Collaborate. Deliver.
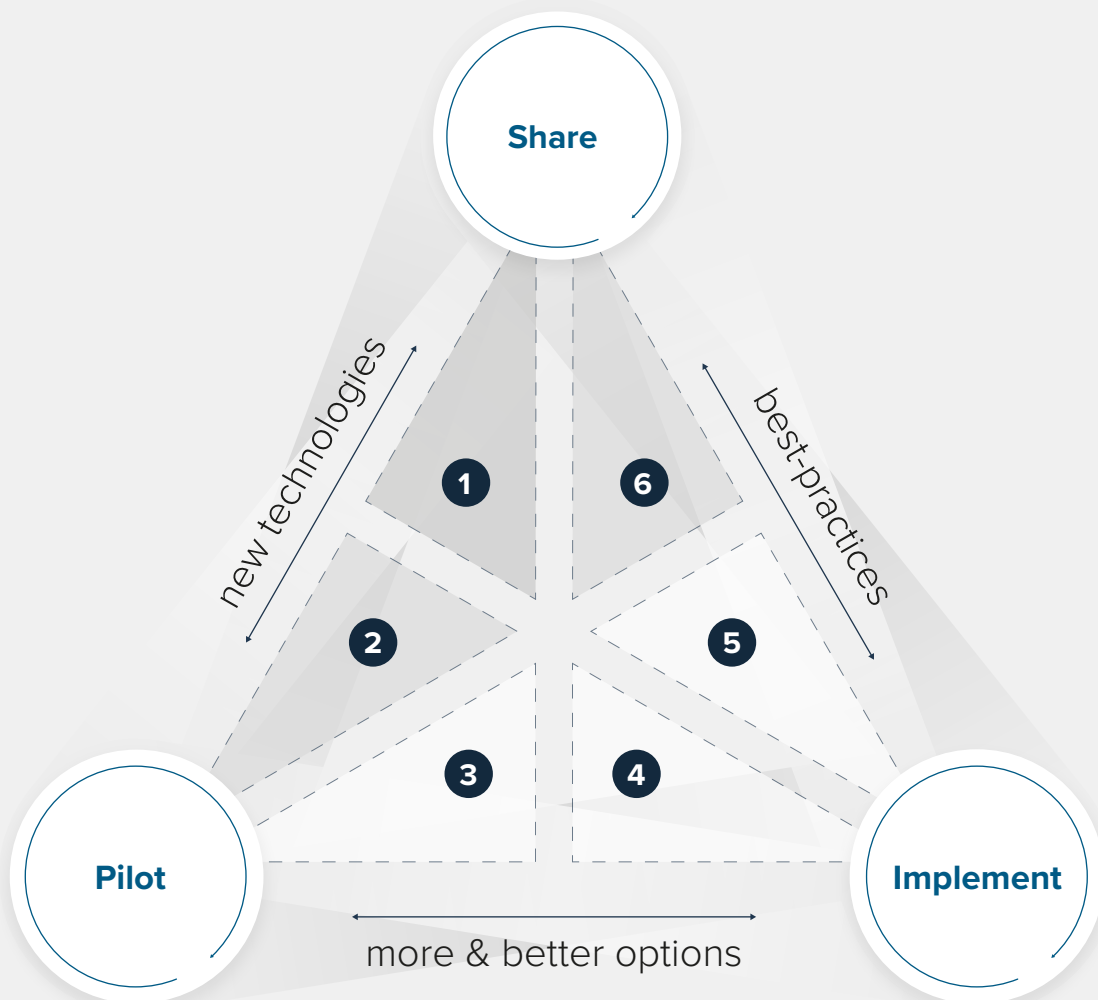
What are the ideal engagemnt points for your company? Start by capturing the key words and locate them on the E2E Tri-Angle.

Depending on the target segment, you can directly participate in one or several activities:

- **S1:** E2E Induction Programme, SpringBoard Events

- **S2:** MicroChallenge, Transportation, DataPorts

- **S3:** True-Code, Excess Packaging, E2E Modeling

- **S4:** CoA Product Data, Verified by GS1, Global Data Model

- **S5:** CoA Product Data, ID Ubiquity, Data Quality Validation Rules

- **S6:** E2E Induction Programme, CGF Events, Study Tour, Shared Groups

Use case: If somebody asks you what E2E is doing about "sharing new technologies" this provides you with the action point "share" and the delivery roadmap "new technologies". You could mention the E2E Induction Programme and SpringBoard Events Series (Segment 1).

In a second step you might also mention the DataPorts Pilot (S2) or an upcoming CGF Events like the Summit (S6), as they cover the key words 'share' or 'new technology' individually.

Index Card Collection

On the following pages you find the fully-fledged glossary of all things related to End-to-End Value Chain.

Actors, Roles & Relationships

The E2E Steering Committee oversees all activities in the left hand tree menu. It supports the CoA Product Data and monitors the life cycle of activities coming from incubation to pilots to implementation and best practice sharing.

Status

☐ Virtual SpringBoard on Digital Manufacturing and Operations, 19 January 2021

☐ CGF Board of Directors Meeting June 2021

☐ The Frog | Tech Event on 1st October 2021

Coalition of Action Product Data

Data standards   Implement

We aim to address two fundamental challenges in the industry's data exchange processes: a) poor quality product data, which has led to lost sales and eroding consumer trust, especially in e-commerce; and b) a plethora of inconsistent approaches to exchanging product data, which results in CGF members incurring huge unnecessary costs to create and exchange those data.

Status

We have launched 5 projects to overcome these challenges:

1. Global Trade Item Number (GTIN) Ubiquity: ensure all products have a unique global identifier registered in the GS1 Registry Platform.

2. Verified by GS1: enable any retailer or marketplace to verify in real time that a given GTIN is valid and relates to a particular physical product.

3. Global Data Model: align brand owners, retailers and platforms on a consistent set of definitions for the product attributes needed to list, order, store, move and sell a product.

4. Data Quality: building a related catalogue of global business validation rules to improve the quality of data being shared in machine-to-machine exchanges.

5. DataPorts: a technology to provide simple, secure and efficient connections between different data sources testing newer AI based approaches.

Coalition of Action Product Data

Data standards   Implement   Best practices

Participation in the CGF Coalition of Action Product Data requires the CEO signature on the CoA Mission Statement.

Status

Current Members (as of October 2020)

AEON CO., LTD., AJINOMOTO CO., INC., BARILLA SPA, COCA-COLA USA, COLGATE-PALMOLIVE, DANONE, GLAXOSMITHKLINE CONSUMER HEALTHCARE HOLDINGS LIMITED, GRUPO ALEN, HEINEKEN N.V., HENKEL AG & Co. KGaA, IGA, JERÓNIMO MARTINS - SGPS, S.A., JOHNSON & JOHNSON, KELLOGG COMPANY, KONINKLIJKE AHOLD DELHAIZE N.V., L'OREAL FRANCE, LAND O'LAKES INC., METRO AG, MIGROS TICARET ANONIM SIRKETI, NESTLE S.A., PEPSICO, INC., SAVENCIA SA, THE J. M. SMUCKER COMPANY, THE PROCTER & GAMBLE COMPANY, UNILEVER N.V., WALMART

Coalition of Action Product Data

Data standards   Implement   Best practices

GS1 believes that the unique identity of everything makes great things possible in retail. If all retailers and Marketplaces rely on the same globally unique identifiers (GTIN, etc.) when referring to the products in their supply chains, retail will become more efficient, more sustainable, supply chains more secure and most importantly, the consumer will be able to have an improved and seamless experience in the physical and digital worlds.

Status

A Marketplace Advisory Team was established by GS1 in July 2020. Following GTIN allocation rules and allowing small and medium size enterprises to get GTINs easily needs the evaluation of more options like direct licensing and others. There are three pillars for collaboration on data:

• Regulations that are in focus globally where identity and standards can be leveraged for Global Supply Chain simplification and compliance

• Opportunities to utilize identity and standards improve the seller journey

• Ways to collaborate on data and standards (GDM, VbG, etc) finding the best areas to work together.

Coalition of Action Product Data

Data standards   Implement   More & better options

The mission of 'Verified by GS1' is to provide to Retailers and Marketplaces accurate, complete, and accessible unique product identification and attribution so that they can authenticate and verify the identity of every product.

Status

The E2E Value Chain Steering Committee and coalition members have asked that data from countries representing 80% of the world GDP be entered into the GS1 Registry Platform (GRP) and be made available for Verified by GS1 by the end of 2021. We are on track for that goal with 36 Countries and more than 50 M GTINs currently loaded. The "Multinational" solution needs to mature.

It is challenging for Brand Owners to source accurate and complete data for their items, this has been a very significant effort. For this effort to be worthwhile, more retailers need to use VbG in their businesses.

ASK: What do we need to do differently to obtain more retail engagement?

Coalition of Action Product Data

Data standards   Implement   Best practices

By simplifying and harmonising the exchange of product data around the world, the GS1 Global Data Model standard increases operational efficiency for brand owners and retailers and improves data accuracy and completeness for consumers.

Status

A standard Global Data Model has been created for food and near food. Global governance has been set up and has been deployed. Validation Rules and code lists for the GDM will be complete at the end of 2020.

A business case, ROI Calculator, Attribute navigator and e-Learning tools have been created and are being deployed in the first 9 requested countries. Germany, Colombia, Netherlands and Belgilux are leading with others now getting underway.

Generally Brand Owners see the value of the Global Data Model but are waiting for Retailers in selected countries to engage.

ASK: What do we need to do differently to obtain more retail engagement?

Coalition of Action Product Data

Data standards Implement Best practices

Data Quality is at the foundation of all Product Data Coalition activities. The community is going through the process of creating and standardising validation rules (for machines to machine exchange) and Data Quality rules (which signal an opportunity for improvement of the data that has been shared) for all of the attributes in the Global Data Model. The work on the Verified by GS1 attributes is finished and deployed and the work on the rest of the Global Core Layer of the Global Data Model is underway.

Status

- Prototype tool developed and piloted for reporting of data quality for the 7 Verified by GS1 attributes. Additional pilots are encouraged.

- Rule development is a community activity and additional engagement by the community is needed. Most data pools and country organisations have provided their internal validation rules and those have been used as the basis for the global rules.

- Brand owners have been working diligently to improve the quality and completeness of their data. Progress has been made but additional work is needed.

- Retailers should focus on the quality of their private brand data and make plans to receive and leverage the Brand Owner Data that is coming available.

- Please share your case studies and learnings with the CGF and GS1 Communities.

Coalition of Action Product Data

Data standards   Pilot   New technologies

A new unique and compact IoT based protocol enabling companies to build reliable and secure peer-to-peer-like communication networks. It allows to automate communication even among completely decentralised data storage and transformation/service landscapes.

Status

The DataPorts software is now ready for download as .NET, Python and Java packages for ERP integration as well as a Desktop Trial version (Windows Operating System). It is being actively tested to enable decentralised peer to peer data exchange.

A subteam initiated selective trials for a three months sprint and will come together for an online live test on November 24th.

ASK: Please encourage your team to evaluate a pilot participation.

Sprints

Progress Report (Rolling Release)

Value networks   Share

E2E provides regular updates on all media channels. The EMagazine is a PDF version containing the monthly Rolling Release of the E2E Progress Report available via your customised PULSE link. It has a new web-based user interface called MONO premiering our innovative content activation mechanism. Additionally, content will partially be piped through to our collaboration paper in Spanish "Espacio Abierto" which we publish together with Logyca (GS1 Colombia).

Status

The first edition of the eMagazine was published in November 2020 and was shared with Steering Committee members only. EspacioAbierto (Spanish) and MONO are additional public channels. PULSE is available for Members only.

Steering Committee

CoA Product Data

E2E Progress Report

Pilots

Share Groups

Study Tour

Induction Programme

Incubation

New Media

Move Forward

Innovation Sprints at E2E

Pilot

Pilots are topics agreed by the Steering Committee to enter a 3 months Sprint driven by a Task Force of volunteers. A pilot can be enriched by multiple experts, selected from CGF Members and non-members alike. The maximum number of participants should range between 5-10 people/companies.

Status

Currently we have 2 pilots running and 2 about to be launched.

Pilots run over 1-3 (max.) Sprints. A Sprint can not last longer than 15 weeks.

Sprints

Innovation Sprints at E2E

Value networks   Pilot   More & better options

Online growth through COVID-19 crisis is accelerating the recent trend of increasing logistics costs in retail value chains. E2E Value Chain Cost Analysis can help identify potential savings that allow for pre-competitive & collaborative approaches to reduce cost and waste in the supply chain.

Status

We will initiate a first of 12 weeks sprint with external help from Incept, a company specialised in analysing flows and producing optimisation men- us. Expected workload is a standard E2E Sprint resulting in 2-4 hours per week, mostly virtual meetings and reviews. This translates into a total of a minimum of 24 hours minimum from a specialist, i.e. three working days.

Sprints

Innovation Sprints at E2E

Physical Logistics   Pilot   More & better options

The aim of the pilot is to gather the necessary collaborative components of a framework that handles packaging material, related data and connected financial process flows, and eventually highlight pre-competitive ways to manage the impact of packaging waste in the entire supply chain.

Status

The pilot will focus on two major points during one (or more) 12 weeks sprints: 1. the reduction of all non consumer packaging including cardboard polymers and other commonly used materials (KPI: m3 | kg) 2. the scalability through potential modularisation of reusable transport items - and its implication on packaging management throughout the value network (KPI: €/$).

The first sprint starts in November 2020 (-> See also 'Transportation')

Sprints

▼

Innovation Sprints at E2E

Physical Logistics   Pilot   New technologies

This pilot delves into key transportation topics affecting the industry today. From waiting times and empty miles to global supply chains and last mile logistics to retail, participants get the opportunity to share their knowledge and best practices with fellow industry peers. Participants work together to tackle questions around four of the main themes identified as the most pertinent during the discussion session.

Status

The key topics were sequenced and the group is currently tackling point 1:

1. On-Time and In-Full (OTIF)
2. Technology
3. Logistics in Smarter Cities
4. Efficiency and Sustainability (-> see also 'Excess Packaging')

Sprints

Navigation (sidebar):

Steering Committee

CoA Product Data

E2E Progress Report

Pilots

   E2E Modeling

   Excess Packaging

   Transportation

   FP - TrueCode

Share Groups

Study Tour

Induction Programme

Incubation

New Media

Move Forward

Innovation Sprints at E2E

Data standards   Pilot   More & better options

Retailers and brands who want to show their customers/consumers the positive impact of their (sustainable) product need at least one common denominator for every facility that is part of the supply chain. The Facility Passports explores new ways of encoding and connecting verified facility data. The essential part is not the ID itself, value creation starts with capturing, storing, verifying, connecting and maintaining downstream supply chain data, as this tends to be expensive and time consuming.

Status

The True-code Facility Passport network and its shared taxonomy allows for the submission of questions and timely answers based on compliance facts (certifications/audits /logo's) for every facility in the product chain, even if it is stored on another "data silo".

The Pilot run by CGF and CGF Member SIM Supply Chain began Sprint #3 at the end of October 2020, testing new technologies on blockchain, zero knowledge proof and DataPorts technology to create more and better options for implementation.

Sprints

▼

Best Practice Sharing

Share

Share Groups are bi-yearly meetings of dedicated interest groups to exchange best practices and discuss top of minds. If your role in the company is comparable to CIO/SVP Supply Chain and you are interested in participating please contact us.

Status

Currently the E2E Pillar hosts two Share Groups:

1. IT, co-chaired by COOP Switzerland
2. Supply Chain, co-chaired by PepsiCo

Best Practice Sharing

Value networks   Share   Best practices

The IT Share Group is a long standing and traditional entity at CGF with some core members participating already over a decade. The discuss all things IT, ranging from security, artificial intelligence, cloud computing, blockchain, machine learning, and much more.

Status

☐   Next Meeting: 8 + 9 June 2021, NYC, hosted by SAP

☐   Study Tour: 9-12 June (Boston Area)

Steering Committee

CoA Product Data

E2E Progress Report

Pilots

Share Groups

IT

Supply Chain

Study Tour

Induction Programme

Incubation

New Media

Move Forward

Best Practice Sharing

Value networks   Share   Best practices

The Supply Chain Group is a voluntary community of Supply Chain Experts or functions in your company collaborating closely with Value Networks. Like its IT counterpart, it has a long history of member engagement at the CGF. The group meets twice a year for best practice sharing and works on Pilots to solve collaborative & pre-competitive challenges encountered (-> See Pilot 'Transportation').

Status

Most participants of the Supply Chain Team are concentrating the work on the Transportation Pilot.

We will create a regular meeting framework with connected site visits in 2021. One option is to attach it to the IT Study Tour in June. Volunteers to help me in the preparation are kindly asked to step forward. Current team: John, Rudy.

Best Practice Sharing

Value networks   Share   Best practices

We offer a weeklong study tour every second year. This special event brings together subject matter experts for a good part of a week visiting company sites and tech companies of interest.

Status

We are looking to combine the IT and SC Share Group in June 2021 on the East Coast to visit StartUps, GS1 US and the MIT.

The following companies kindly offered support in planning the agenda: PepsiCo, TagOne.

Member Engagement

Share

The E2E Induction Program is a clearcut, down to earth 5-step catalogue of engagement opportunities for members and non-members alike. Content will be selected according to demand and level of interest of CGF Members.

Status

In 2020, we have so far published 15 blog posts, 9 podcasts, 9 Learning Series and organised 5 SpringBoard events (two physical and three virtual).

Companies who have contributed content include IceCreamLabs, Capgemini, SyncForce, Skuchain, IBM, SourceMap, Advantage Group International, Veeva, Recall Infolink/SummitVentures LLC.

Member Engagement

Value networks   Share   Best practices

Most of our blog posts are written in the style of opinion pieces about a topic of the author's choice that has to do with the key E2E themes or industry hot topics. However, kindly note that blogs should not include any sales/marketing content. We usually suggest to aim for around 700 words for the post.

Status

Our most recent blog posts include:

- COVID-19 Causes a Stutter Step in Sustainability Progress, What's Next? Advantage Group International

- Increased Profits Driving Dynamic Pricing Adoption, Quicklizard

- Sustainable Supply Chain is the Only Way Forward: an Insight into the Iso Modular GS1 Transport Box and Sustainable Point of Sale Materials, P&G

- Achieving a More Responsive Supply Chain: Lessons from COVID-19, Skuchain

Member Engagement

Value networks   Share   Best practices

Podcasts about innovative concepts and technologies.

The intention is to showcase expert know-how.

Status

Our most recent podcasts are:

- Supply Chain Transparency, Reimagined, TagOne

- Responsive Supply Chains, Skuchain

- COVID-19 and Its Impact On Consumer Goods Companies, IBM

- End-to-End Value Chain Mapping in a Global Crisis, Sourcemap Inc.

- Technology Solutions Tackling Dairy Industry Challenges, IBM

Member Engagement

Value networks   Share   New technologies

A collection of educational publications and infographics produced with the aim of delivering thought-provoking material on trending topics.

Who is it for? The target audience for Learning Series material is the CGF membership.

Status

Our most recent Learning Series include:

- An Elastic Band Stretched Too Far
- Management Cybernetics
- DataPorts in Action
- Artificial Intelligence-Driven e-Catalogues

Member Engagement

Value networks   Share   New technologies

SpringBoards are the E2E Signature Event with 15-20 attendees and 3-4 presenters. The aim is to explain technology in a practical way allowing for quality networking time. We are working on a virtual platform moving away from front presenters like Zoom, Teams, Meet, Jitsi and others. Our focus is to provide networking options.

Status

The new virtual SpringBoard platform was launched on October 27th during the "Time For Data" Online Symposium. This event was kindly sponsored by Capgemini, CI&T, Selerant and SyncForce.

The next SpringBoard event, on Digital Manufacturing and Operations and will take place on 19th January and will be hosted by Accenture.

Innovation Sprints at E2E

Value networks   Pilot   New technologies

Does it work? A MicroChallenge consists of a 3-month pilot of up to 5 companies (Task Force) evaluating a new, or a combination of several technologies. Participants include one or more Service Providers and one or two manufacturers and retailers. The objective is to produce a Report in the form of an E2E Learning Series to share best-practices regarding the experienced readiness of the technology.

Status

None active. We are looking for volunteers on several areas, please reach out to Rudy in case you are interested:

- Optical Spectrometer (Identify a product through its packaging and content)

- Smart Shelves (DataPorts connect IoT enabled shelves, camera and ERP system)

- IoT & Product Serialization creating digital twins for every single unit

Sprints

Food for Thought

Contains fresh topics and new challenges presented during E2E Steering Committee calls and meetings. They can be converted into Pilots if we achieve a handful of companies volunteering to drive a first 3 month Sprint in form of a task force.

Status

1. Drive GS1 Logistic Standards as a possible field of work especially in developing Markets. C-19 has apparently surfaced weaknesses with regard to correctly marked goods and items in transport.

2. Future Of Fresh. After a very successful SpringBoard in February, we need to decide if and how to proceed on the topic.

Documenting E2E Work

We are continuously producing more multimedia content. These are summaries of meetings, expert interviews and tutorials.

Status

Our most recent videos published are:

☐   Close Up with E2E Director Ruediger Hagedorn (link).

Some thoughts about the next steps. How do we know that we are on the right track with all these activities?

Status

Currently the two major activity streams Product Data Coalition of Action and the End-to-End Value Chain & Standards Steering Committee meet virtually every second week.

We have added monthly SpringBoards to our brand new FROG platform to allow for alternative best-practise exchange.

COMING UP NEXT

The E2E KPI System explained - How to measure value creation numerically!

Close UP: Interviews with stakeholders in the Product Data Coalition of Action

...and much more

eMagazine_n°2

The Latest Updates from the End-to-End Value Chain and Product Data Coalition

End-to-End
Value Chain