Progress Update GS1 (Agriculture)

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sector lead agriculture, GS1 NL

project leader, agriculture project, GS1 in Europe

December 13, 2022

Agenda

- GS1 Agriculture: local (NL), regional (EU) and global

- The GS1 Product Passport

- The GS1 Organisation Passport (based on GLN Registry)

GS1 (Agriculture)

Progress Update

GS1 is a global standards organisation

GS1 believes in the power of standards
to transform the way we work and live

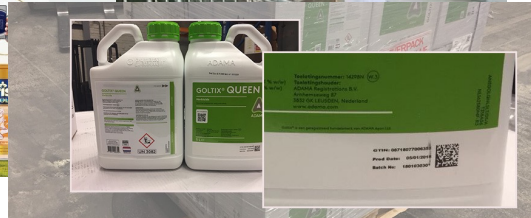|	
Neutral and not-for-profit	User-driven and governed
Global and local	Inclusive and collaborative

https://www.gs1.org/docs/GS1-Strategy-Booklet-2022.pdf

Introduction GS1 | History

Original focus on 'last mile' (retail/logistics)

- 1974: first Retail barcode-scan (USA)

- 1976: Albert Heijn establishes EAN Nederland

- 1977: first Retail barcode-scan (NL)

- 2005: EAN (EU) and UPC (US) → GS1

- 2021
  - 118 Member Organisations (MO's) worldwide
  - Data standards, Products, Services, incl. EDI messages & barcodes.
  - 12 'globally unique' GS1 ID keys
  - 6,000,000,000 retail barcode scans/day
  - °GS1 Agriculture

Focus on 'first mile' (upstream)

GS1 Netherlands | Agriculture

Medical Devices (Healthcare)	Agriculture NEW!	GM	CPG	Apparel	Pharma (Healthcare)	Construction

FRESH UPSTREAM

An initiative of:

Groenten Fruit Huis · Frug i Com · GS1 Netherlands · FNLI FEDERATIE NEDERLANDSE LEVENSMIDDELEN INDUSTRIE · LTO Nederland · CBL centraal bureau levensmiddelenhandel · Nevedi

NINO : National Identification is No Option

■ Countries with a GS1 Member Organisation

■ Countries served on a direct basis from GS1 Global Office (Brussels)

Worldwide Network Organisation

115 Member Organisations

The Global Language of Business

GS1 in Europe | Agriculture
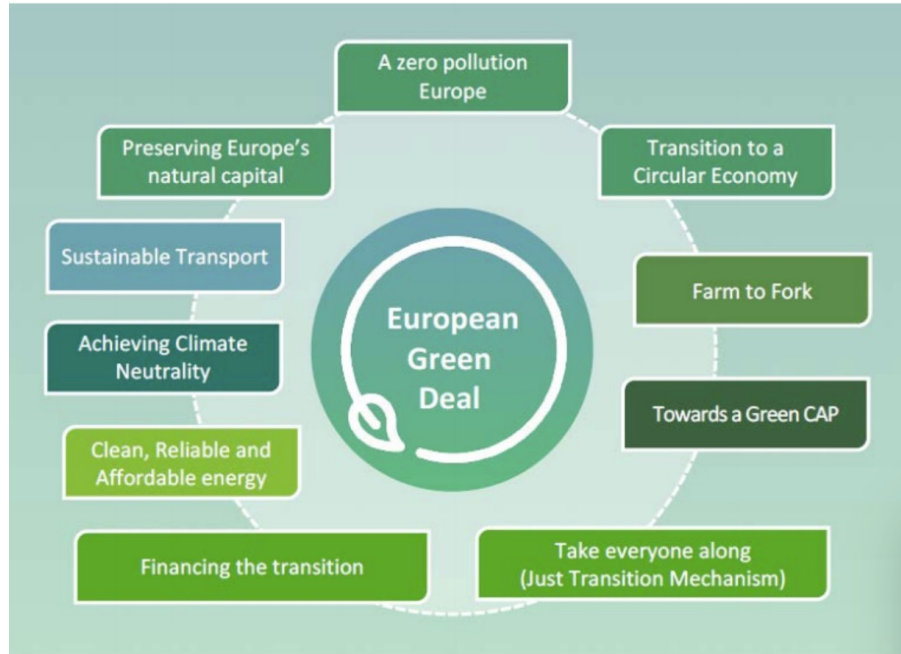
GS1 Digital Product Passport (DPP)

Why? What is it?

Why? | Key EU legislation on circularity is coming

- On 30 March 2022, as part of a new legislative package on the Circular Economy, the EU launched the **Sustainable Products Initiative (SPI)**, setting the stage for the wide-scale introduction of Digital Product Passports (DPPs)

- On 30 November 2022 the EU revised the **Packaging and Packaging Waste Directive** to ensure that "all packaging on the EU market is reusable or recyclable in an economically viable way by 2030"

- On 21 April 2021, the EU adopted a proposal for a **Corporate Sustainability Reporting Directive (CSRD)** requiring all companies to disclose information on the way they operate and manage social and environmental challenges

Why| Our members need to be complaint and ask for solutions

DPP Solution

- Our members need a Digital Product Passport combining
  - **static product master data** on a granular level
  - together with **usage data** ("wear and tear")
  - together with **event data** (where, what, when)
- Meaning the
  - aggregating additional data of the product journey of each individual product
  - linking of different databases
  - providing the DPP data to different stakeholders
- Requests for a solution to create their DPP, not for standards

GTIN: 8712345678906
BRAND NAME
PRODUCT DESCRIPTION
URL IMAGE
PRODUCT CLASSIFICATION
NET CONTENT & UNIT OF MEASURE
TARGET MARKET

GS1/PRODCTPSSPRT2022

**50 years ago –
introduction of the
digital identifier,
the barcode and
EAN / GTIN**

What| From digital identifier to product passport

Global language for business

Product ID
Company name

GTIN: 9504002100016

Brand name
Product description
Product image URL
Global product category
Net content & unit of measure
Country of sale

Identify

Sharing product data
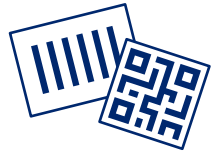
Barcodes

Verified by GS1

Location registry

Data pools
(Global Data Synchronization)

Quality Control

What| From digital identifier to product passport

Identify

Product ID
Company name

GTIN: 9504002100016
Brand name
Product description
Product image URL
Global product category
Net content & unit of measure
Country of sale

Barcodes

Verified by GS1

Location registry

Digital Links

Sharing product data

Data pools

Global data model

Quality Control

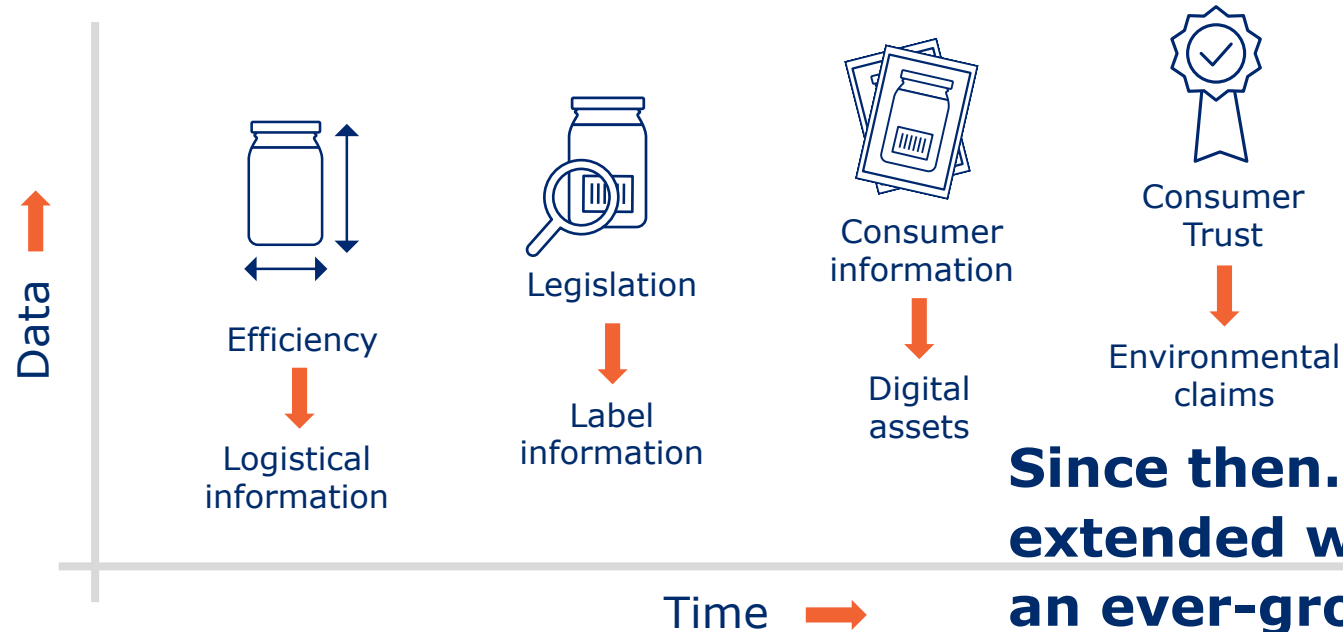## Event data

GS1 standards for sharing event data

Enabling the sharing of product –related information is the core of GS1

GS1 Nederland

What| From digital identifier to product passport

Data (vertical axis)

Efficiency
↓
Logistical information

Legislation
↓
Label information

Consumer information
↓
Digital assets

Consumer Trust
↓
Environmental claims

Time →

Since then… identifier extended with an ever-growing data model

GS1 Nederland

What| From digital identifier to product passport

...becoming even more important when identifying product journeys

Produce   Use   Waste

Recycle

Produce

Use

Data stream

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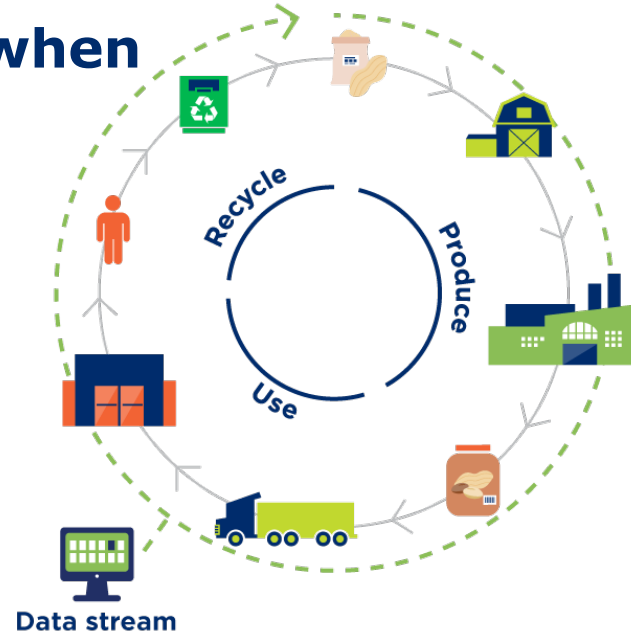
What| From digital identifier to product passport

Leading to a data explosion

Describing **what, when, who and where**: basis for transparency, checking of claims, recycling, ESG reporting

Building trust, taking corporate responsibility

Supported by product (what) and location passports (who and where) and trusted registries

GTIN: 8712345678906
BRAND NAME
PRODUCT DESCRIPTION
URL IMAGE
PRODUCT CLASSIFICATION
NET CONTENT & UNIT OF MEASURE
TARGET MARKET
GS1/PRDCTPSSPRT2022

GLN: 8718711030903
TYPE - CLASSIFICATION
Legal Entity - Grower, Packer
LEGAL ENTITY IDENTIFIER
KVK 18070981
ADDRESS
Mulhara 36, 4271 BL, Dussen, NL
GS1/ORGPSSPRT2022

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Nederland

Product data is the core of the digital product journey

Physical

Online

Omnichannel

GS1
Nederland
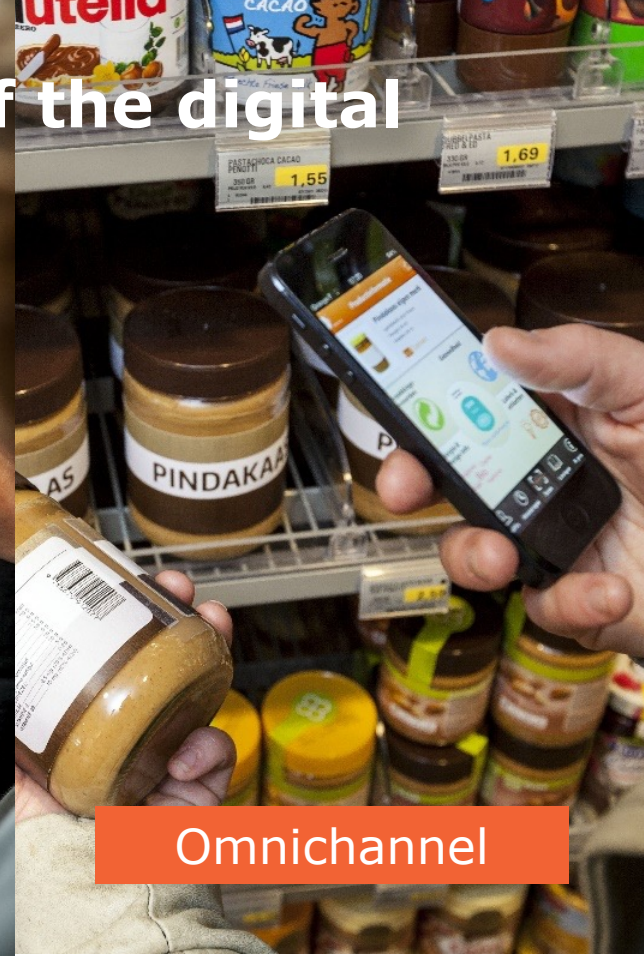
Importance of unique identifiers, standardized data model and consistent trusted data

Interoperability

Single source of truth

Less errors

Brand
Strawberry Jam

Brand
Strawberry Jam

GS1

Add to cart

Nutrition ★★★★☆
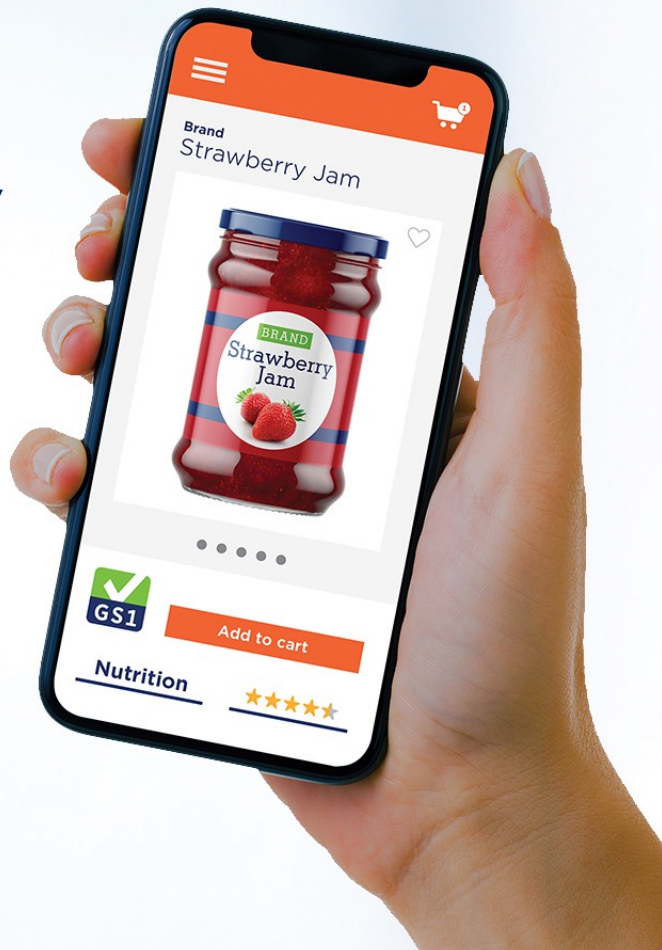
Build trust - Providing information to customers to take well informed decisions

CO2 footprint,
child labour,
certificates, etc..

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**Providing
industry
information
to become
circulair**

Supported by the further development towards 2D barcode

Giving the opportunity to add batch information but also marketing information by a GS1 Digital link

2D supports a wide variety of use cases

Inventory Management

Traceability

Safety

Sustainability
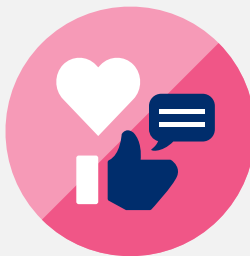

Consumer Engagement

Improved Packaging

Mission: Efficient & transparent product chains through (product) data exchange

Our ambition is to be the platform and service organization for product data (exchange) in the Dutch market and actively drive the international GS1 agenda

Our mission is to connect organisations to enable the sharing of (individual) product journeys

GS1 believes in the power of data to transform the way we work and live

GS1®
Nederland

What| An example / visualisation
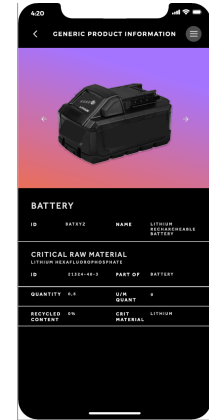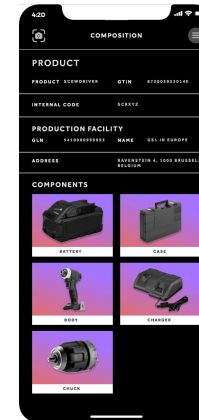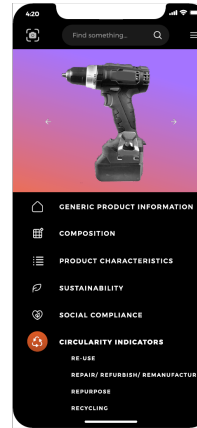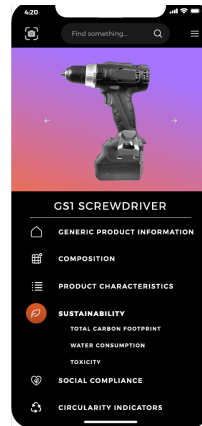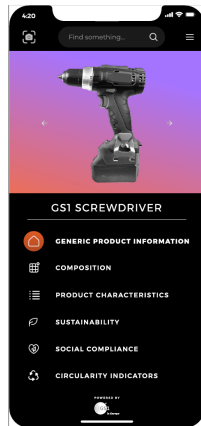
Digital Organisation Passport (DOP)

What is it?

What| Digital Organisation/Location Passport

- **for parties ('who')**

 **&**

- **For places ('where')**

Enable efficient & effective interoperable supply chains, also Upstream!

Why| Digital Organisation/Location Passport

**Increasingly important role of the place 'where' on top of the party 'who'**

- CORPORATE SOCIAL RESPONSIBILITY

- CIRCULAR FOOD SYSTEMS & WASTE

- ENVIRONMENTAL FOOTPRINT

- AGRICULTURE INPUT PRODUCTS

- FOOD SAFETY & SOCIAL CERTIFICATION

- EXPORT/IMPORT

- LOCAL SOURCING

- TRACEABILITY

- TRANSPARENCY

- SUSTAINABILITY
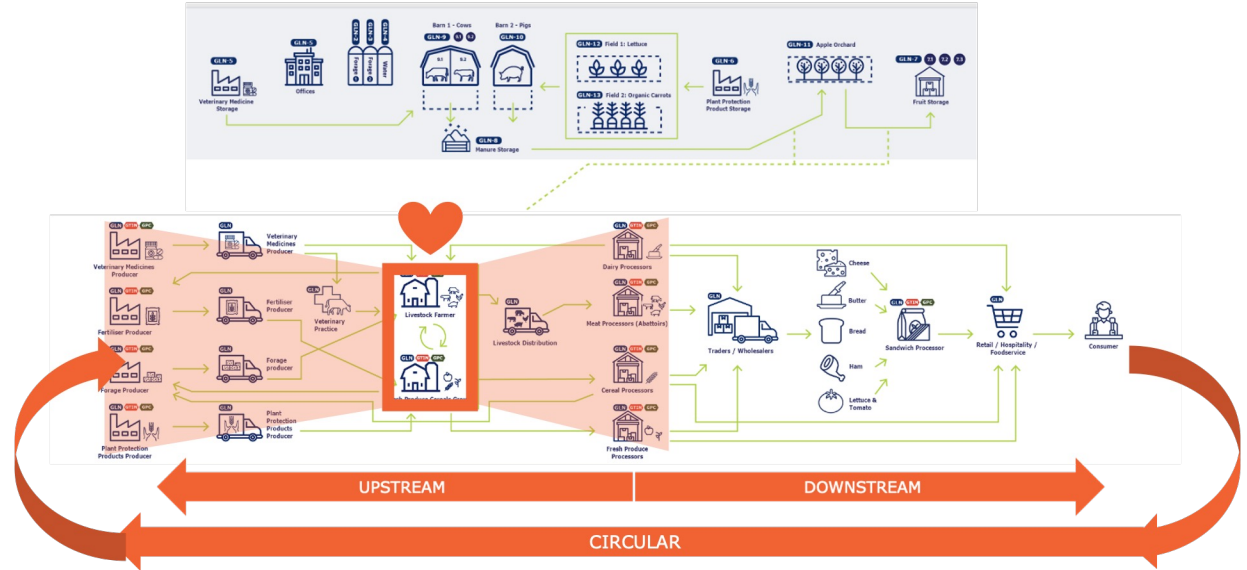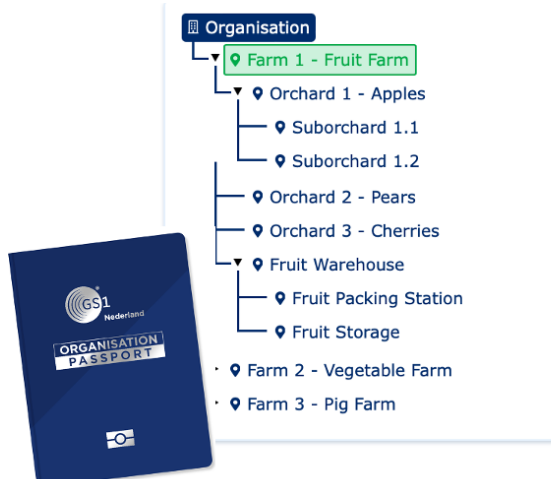
What| An example / visualisation

- **for parties ('who')**

  &

- **For places ('where')**
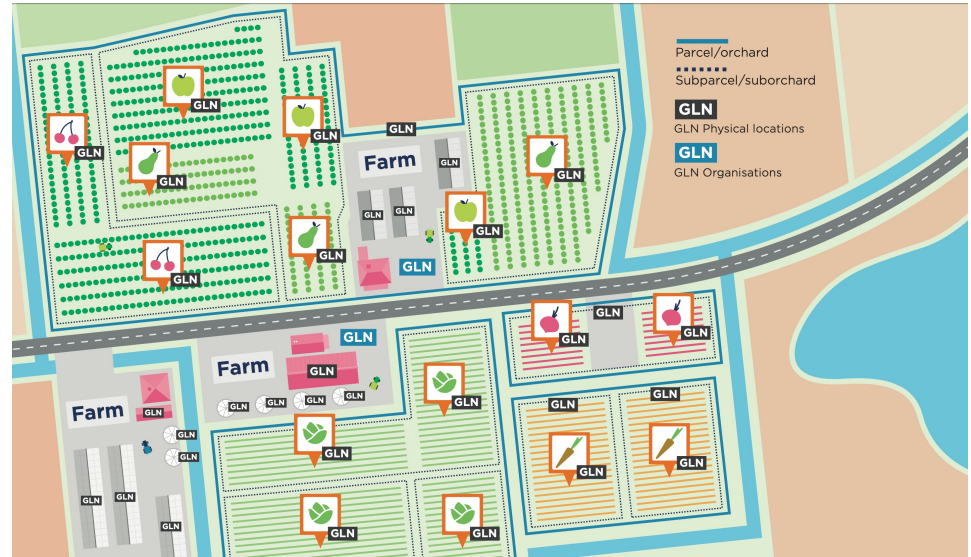
What| An example / visualisation

GLN Registry – Digital Organisation Passport

What| API connection in the making

GLN Registry – Digital Organisation Passport

Organisation
Farm 1 - Fruit Farm
Orchard 1 - Apples
Suborchard 1.1
Suborchard 1.2
Orchard 2 - Pears
Orchard 3 - Cherries
Fruit Warehouse
Fruit Packing Station
Fruit Storage
Farm 2 - Vegetable Farm
Farm 3 - Pig Farm

1. Location
2. Collaborative IDs
3. Address
4. Contact
5. Certifications
6. Assets

use in supply chain solutions

Questions?