Introduction of SmartBarcode®

Technology for the Supply Chain Traceability and Transparency

01/2021

LOZI
ZIP THE LOGISTICS

https://www.lozi.jp

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01
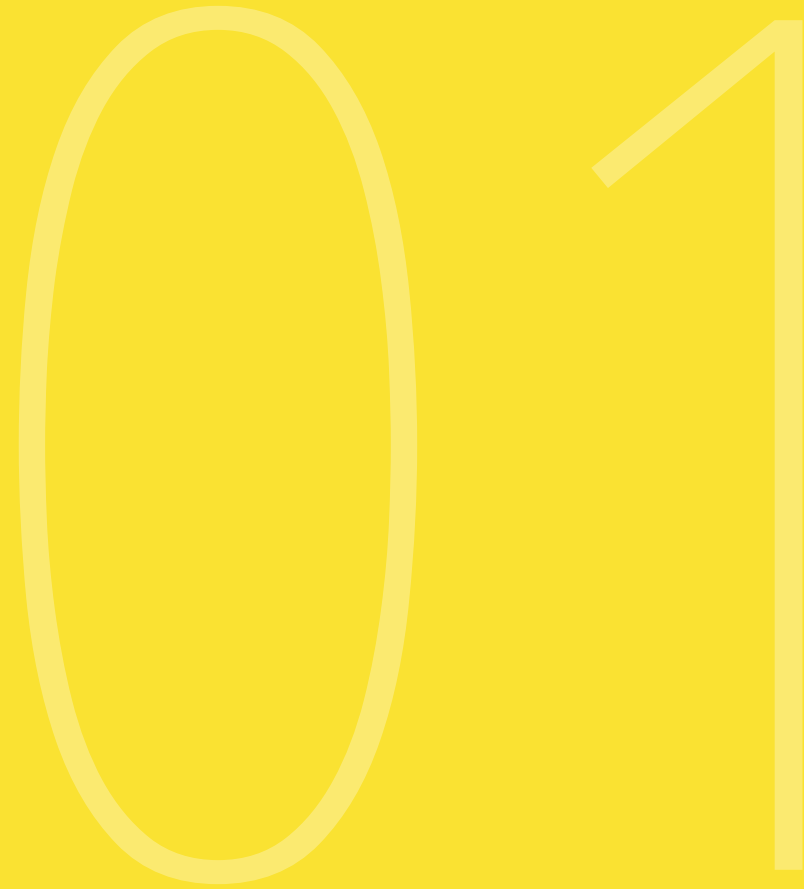
Company Profile

Name	LOZI Inc.
Establish	Nov / 2018
CEO	Martin Roberts
Address	#1104, 2-19-1, Nishiki, Nakaku, Nagoya-shi, Japan 4600003
Capital	15,000,000JPY Capital reserve:7,400,000JPY
TEL	81-52-212-8779
URL	https://www.lozi.jp
Category	Smart Logistics Solution（SmartBarcode®、Warehouse Robots）

About Us

Established in 11/2018
Capital：¥15,000,000

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JV with OrganicSmart, Inc.(USA) →

Established in 07/2020
Capital：¥5,000,000

OrganicSmart

Smart Logistics

Fresh Food Traceability

SmartBarcode×Blockchain Network

Delivery / Warehouse operations
Logistics Robot

← Integration →

Efficient and Secure Traceability Tool
SmartBarcode

← →

Platform for Food Service Providers
OrganicSmart

Auto Measurement

Auto Transport

Logistics Tracking

Manufacturing

Asset Sharing
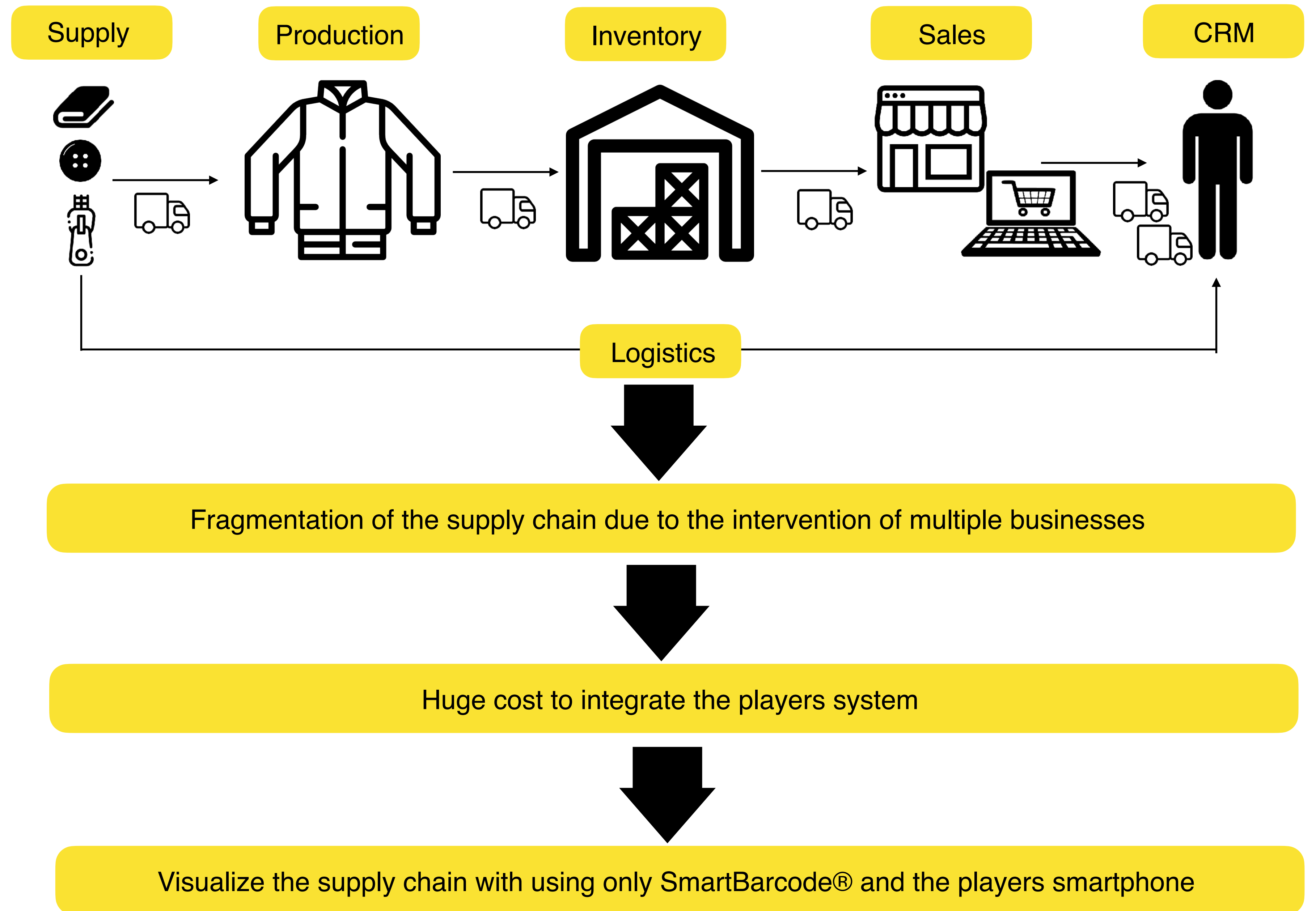
Food Safety
(Consumers)

Supply chain mgt
(Business)

The simplest and most flexible traceability tool

SmartBarcode®

patent pending

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**Problem Solving
"Supply chain fragmentation"**

Supply	Production	Inventory	Sales	CRM

Logistics

Fragmentation of the supply chain due to the intervention of multiple businesses

Huge cost to integrate the players system

Visualize the supply chain with using only SmartBarcode® and the players smartphone

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SmartBarcode®
Outline

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About SmartBarcode® "patent pending"

1. QR code standards
2. Unique URL per transaction (variable code)
3. Pairing capability for any types of data
4. One-to-many relationship between one barcode and various data sets
5. Tracking and tracing information can be displayed on a smartphone
6. Information can be shared effectively among the players

● **The advantages and uniqueness of SmartBarcode**

[1D Barcode / RFID]

RFID   **1D Barcode**
1234 5670
1 : 1

[QR Code]

QR Code   **SQRC by DENSO**   **SmartBarcode**
1 : 1   1 : 2   **1 : N**
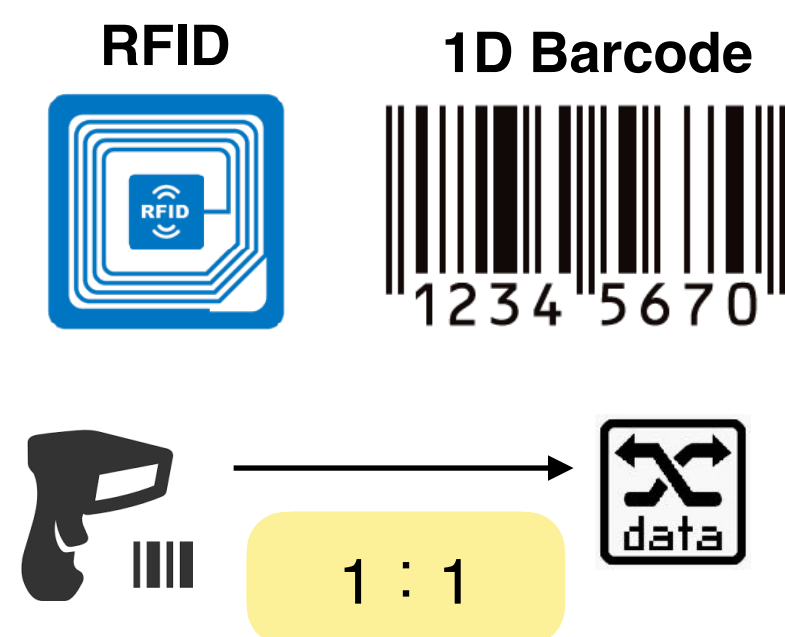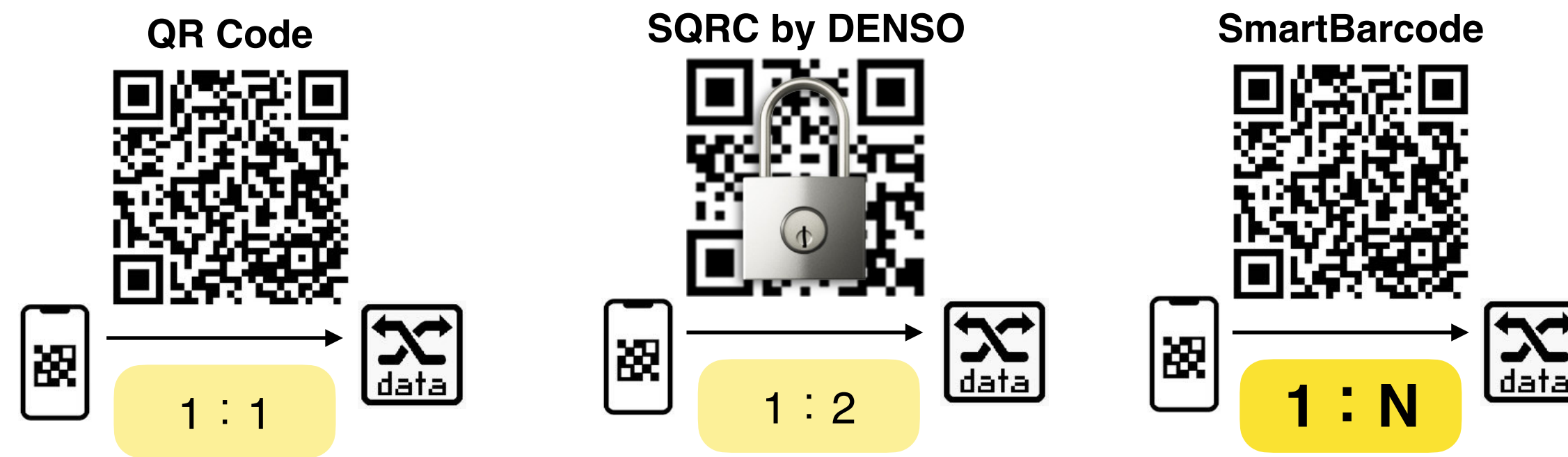
Transaction Control

NativeApp(Close) & WebApp(Open)

Private Key for Apps & IoT devices

Controlling transactions by time

Controlling transactions by location

Traceability information is stored in the relational DB by each transaction and output to the players smartphone.

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Basic Concept

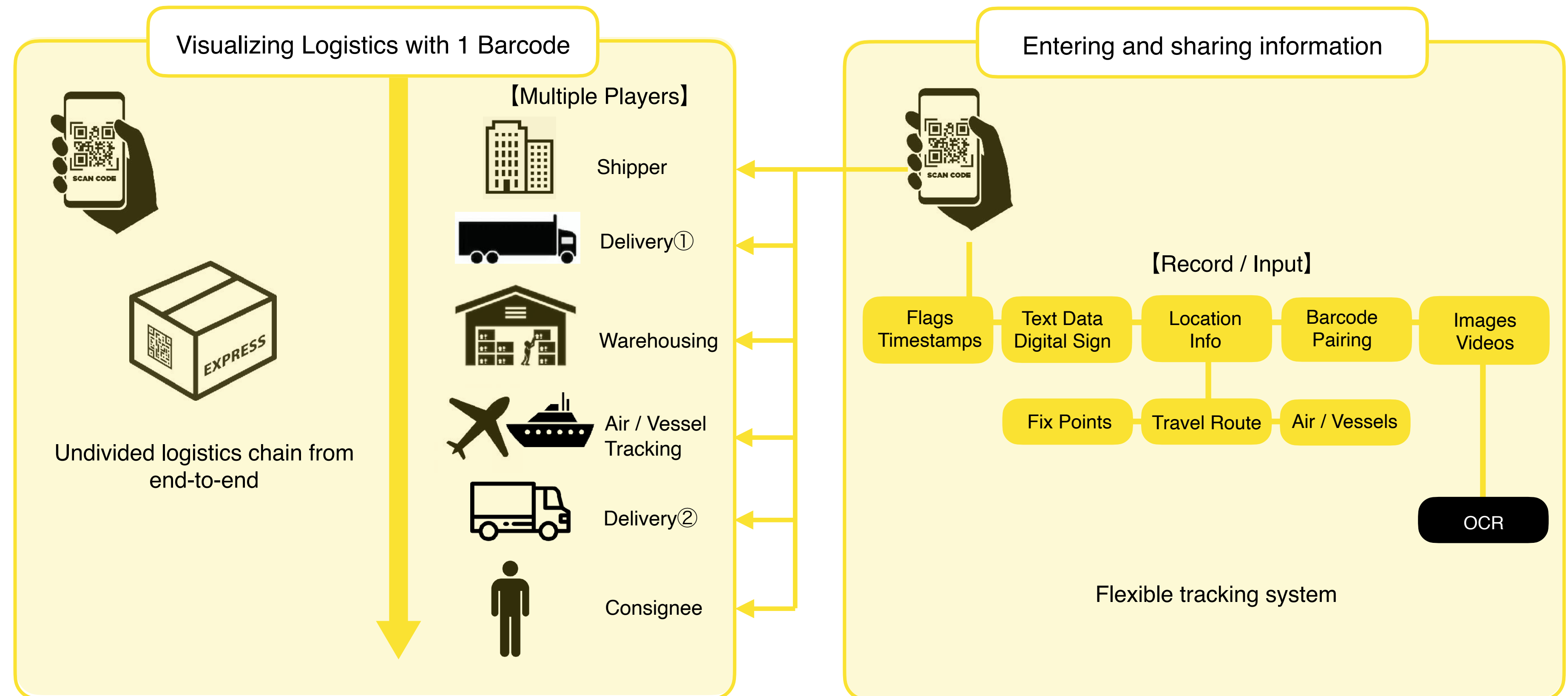| Purpose	To solve the fragmentation of supply chain using a "Single Barcode"
Function1	Most user-friendly, real-time tracking system using any smartphone
Function2	Timestamped location and user data at each tracking point
Function3	Our "variable" QR code algorithm incorporates most updated information

Visualizing Logistics with 1 Barcode

SCAN CODE

EXPRESS

Undivided logistics chain from end-to-end

【Multiple Players】

Shipper

Delivery①

Warehousing

Air / Vessel Tracking

Delivery②

Consignee

Entering and sharing information

SCAN CODE

【Record / Input】

Flags Timestamps	Text Data Digital Sign	Location Info	Barcode Pairing	Images Videos
	Fix Points	Travel Route	Air / Vessels	

OCR

Flexible tracking system

Pairing

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Purpose1 — Barcode pairing to prevent mis-shipping /mis-delivery

Purpose2 — Barcode pairing for effective management of procurement logistics and manufacturing
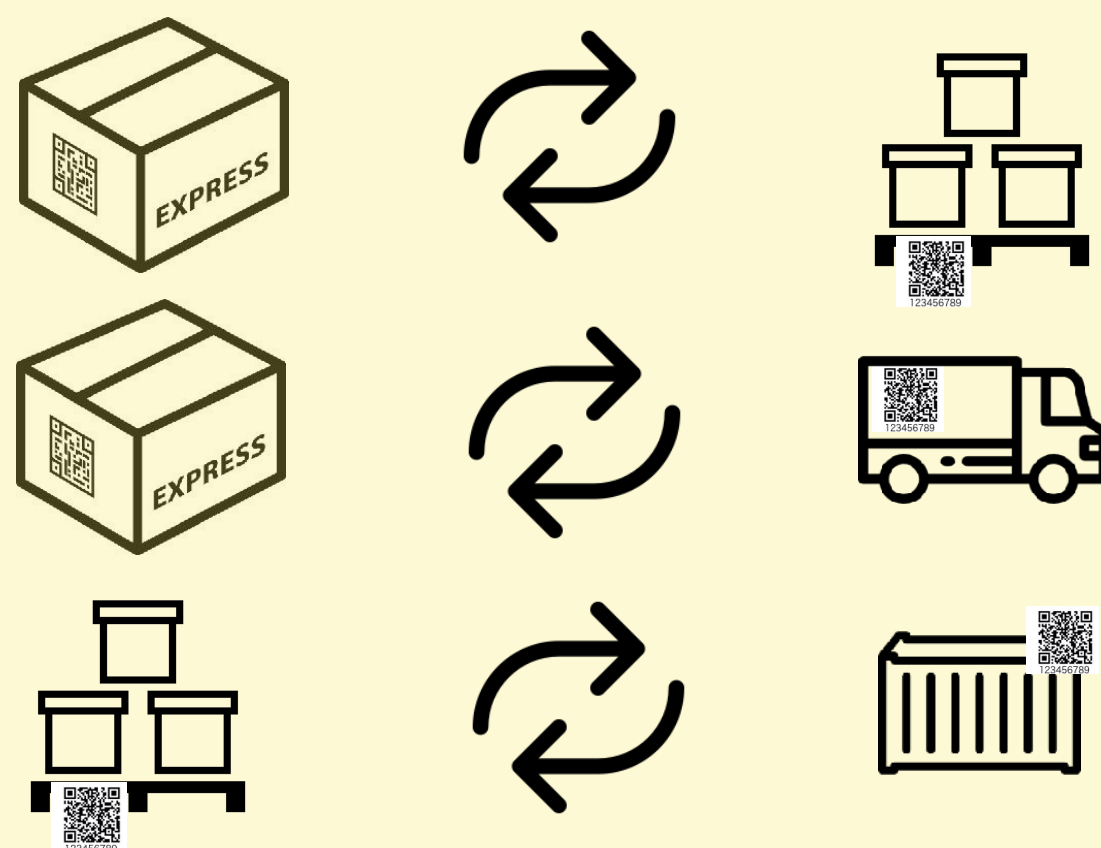
Function1 — Parent and child barcodes can be paired with their information for data integration, which also helps to keep from mis-shipping / mis-delivery

Function2 — Visualization of the purchasing / storage / manufacturing for sharing and effective management

Preventing mis-shipping / mis-delivery

【Various Loading Pairings】

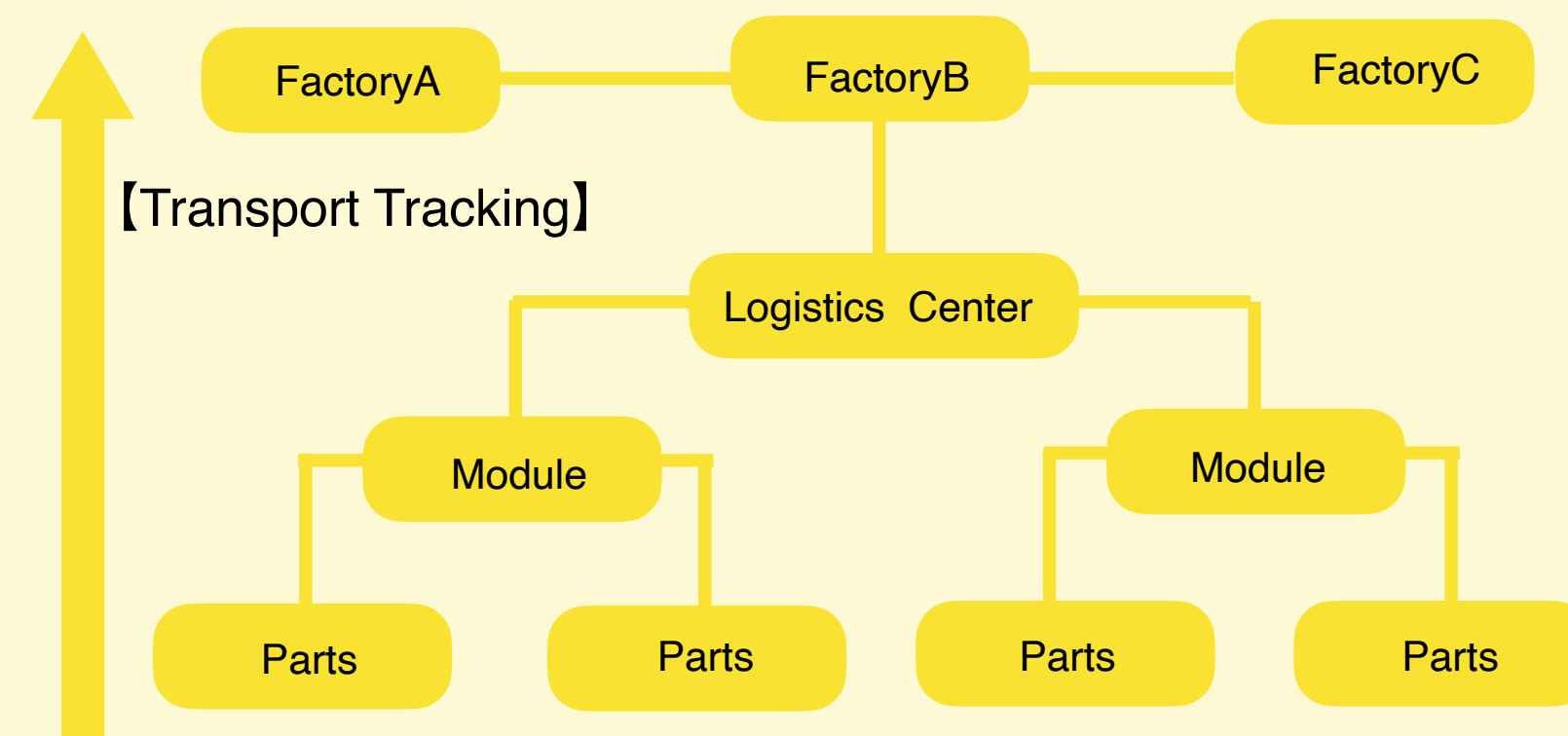【Location-independent smart phone pairing】

Domestic WH   Overseas WH   3PL WH

Procurement / Manufacturing

【Manufacturing Management】

【Procurement Management】

FactoryA — FactoryB — FactoryC

【Transport Tracking】

Logistics Center

Module   Module

Parts   Parts   Parts   Parts

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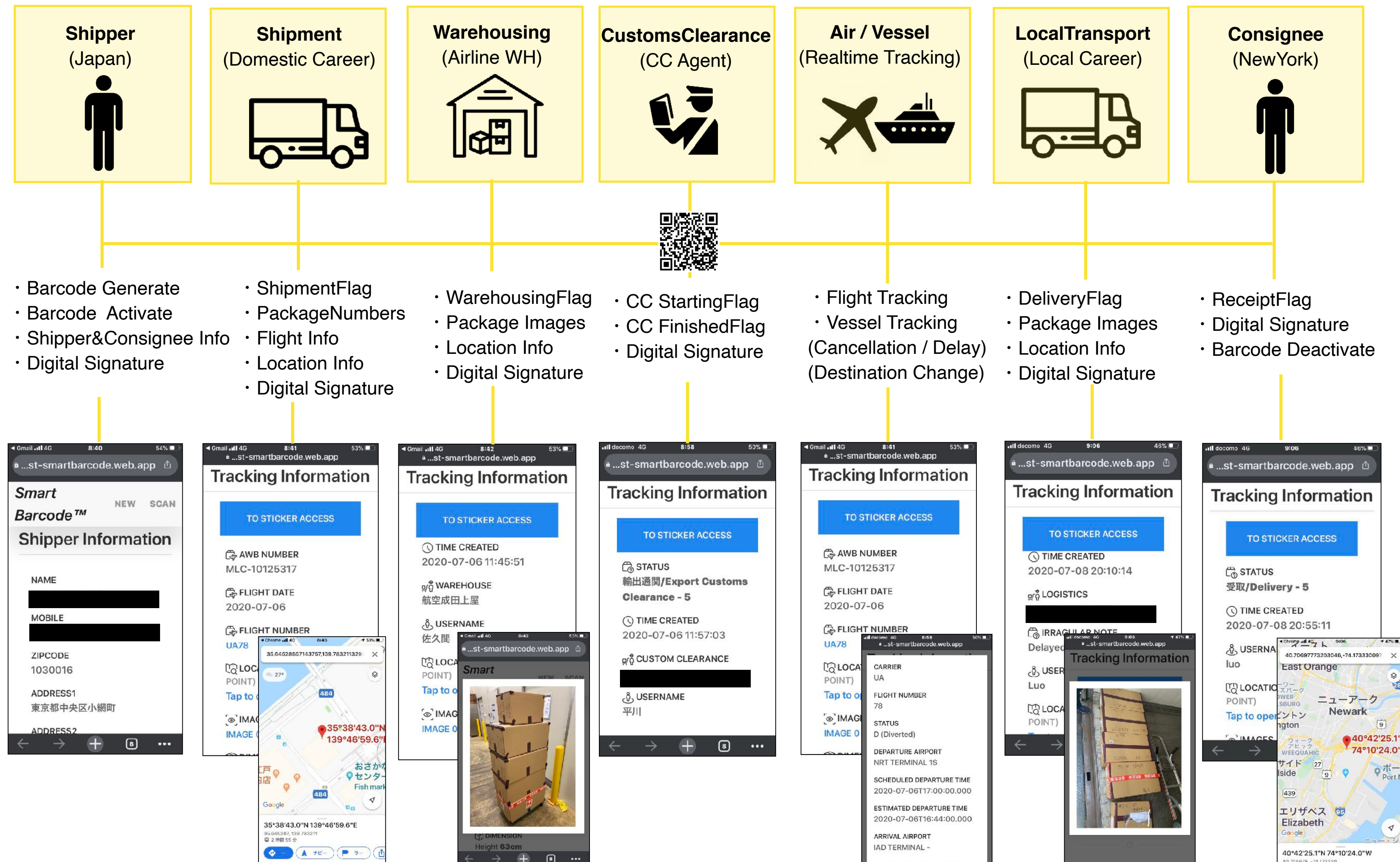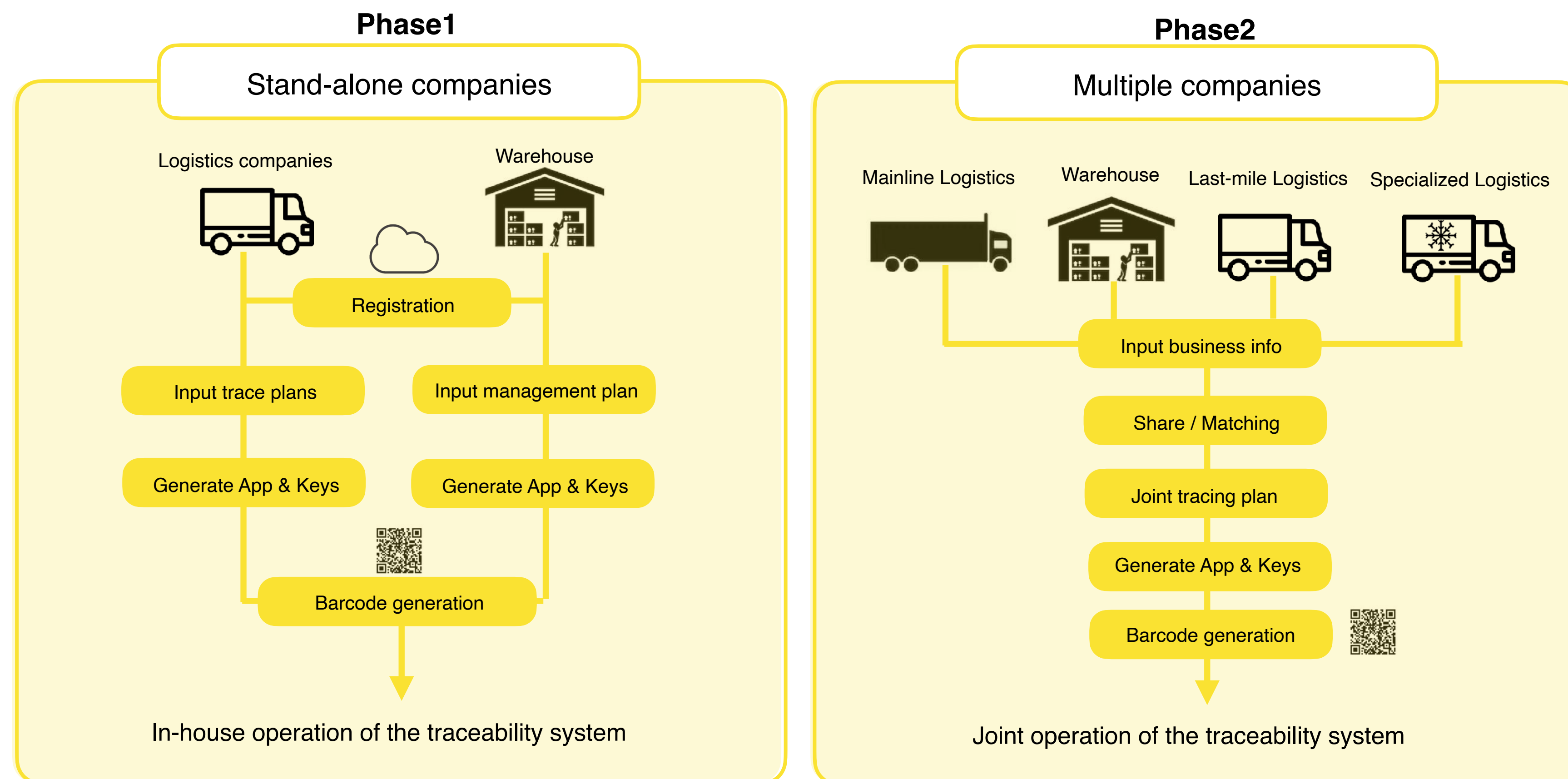**PoC Examples**

Shippers / Consignees / Multiple logistics companies / Multiple transportation methods / Customs clearance procedures, and many other processes in the International Logistics **using SmartBarcode.**
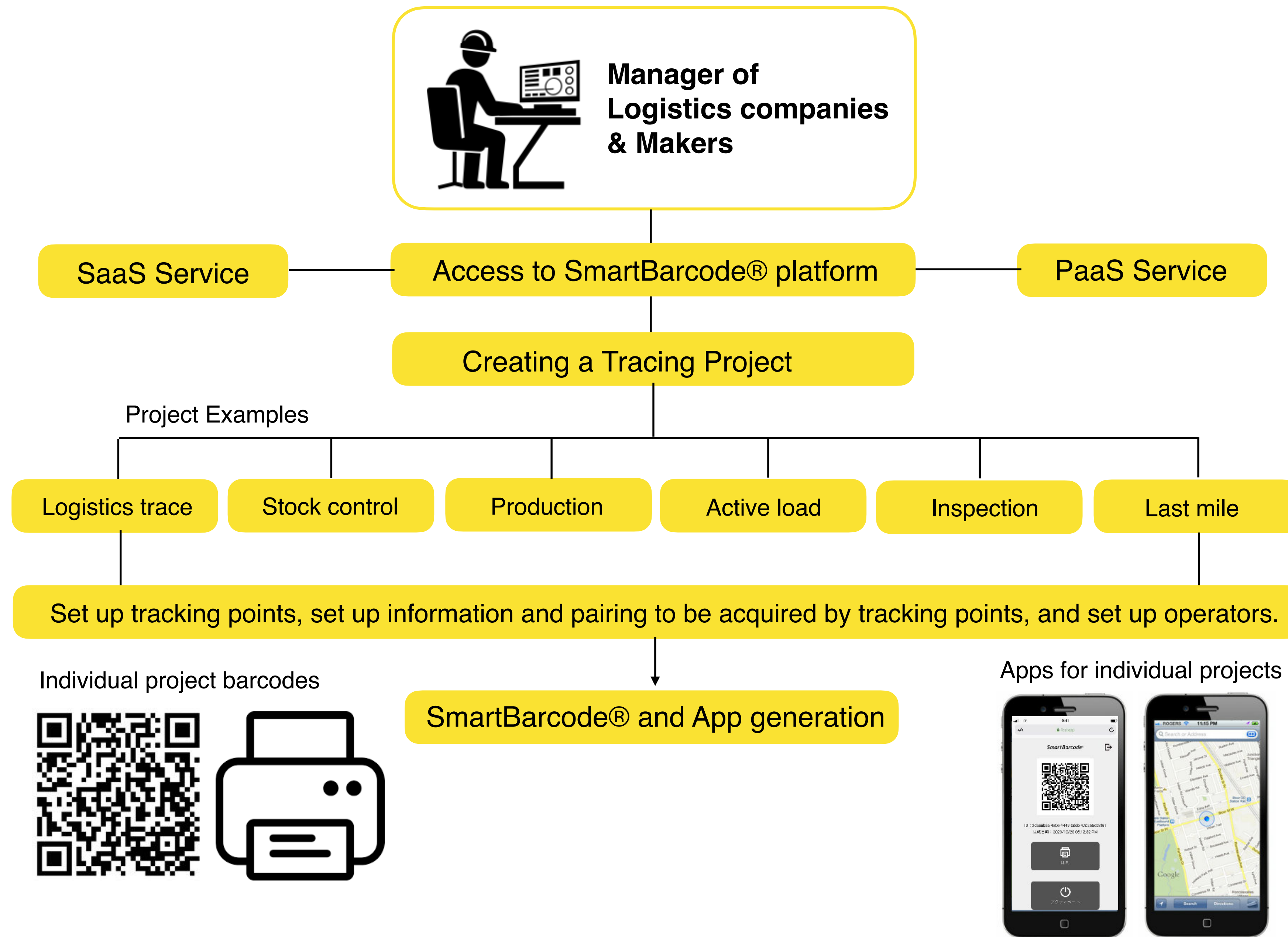
【**Single barcode to trace**】

Shipper (Japan)	Shipment (Domestic Career)	Warehousing (Airline WH)	CustomsClearance (CC Agent)	Air / Vessel (Realtime Tracking)	LocalTransport (Local Career)	Consignee (NewYork)

・Barcode Generate
・Barcode Activate
・Shipper&Consignee Info
・Digital Signature

・ShipmentFlag
・PackageNumbers
・Flight Info
・Location Info
・Digital Signature

・WarehousingFlag
・Package Images
・Location Info
・Digital Signature

・CC StartingFlag
・CC FinishedFlag
・Digital Signature

・Flight Tracking
・Vessel Tracking
(Cancellation / Delay)
(Destination Change)

・DeliveryFlag
・Package Images
・Location Info
・Digital Signature

・ReceiptFlag
・Digital Signature
・Barcode Deactivate

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Open Platform Image

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Purpose1	Providing smart barcode systems for transport companies, warehouses, and global logistics companies
Purpose2	Share assets between multiple transport companies, warehouses and global logistics companies
Function1	Trace design and barcode generation for stand-alone businesses
Function2	Trace design and barcode generation between operators (including matching system)

Phase1
Stand-alone companies

Logistics companies   Warehouse

Registration

Input trace plans   Input management plan

Generate App & Keys   Generate App & Keys

Barcode generation

In-house operation of the traceability system

Phase2
Multiple companies

Mainline Logistics   Warehouse   Last-mile Logistics   Specialized Logistics

Input business info

Share / Matching

Joint tracing plan

Generate App & Keys

Barcode generation

Joint operation of the traceability system

●Create tracing projects and generate barcode/mobile apps

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How it works

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Manager of
Logistics companies
& Makers

SaaS Service ——— Access to SmartBarcode® platform ——— PaaS Service

Creating a Tracing Project

Project Examples

| Logistics trace | Stock control | Production | Active load | Inspection | Last mile |

Set up tracking points, set up information and pairing to be acquired by tracking points, and set up operators.

Individual project barcodes

SmartBarcode® and App generation

Apps for individual projects

Management Screen

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Projects list

Printout the Barcodes

Creating a project

Setting data for each tracking point

Tracking Points

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R&D

RFID integrated Barcode Stickers

Smart Barcode®   RFID

Data Integration
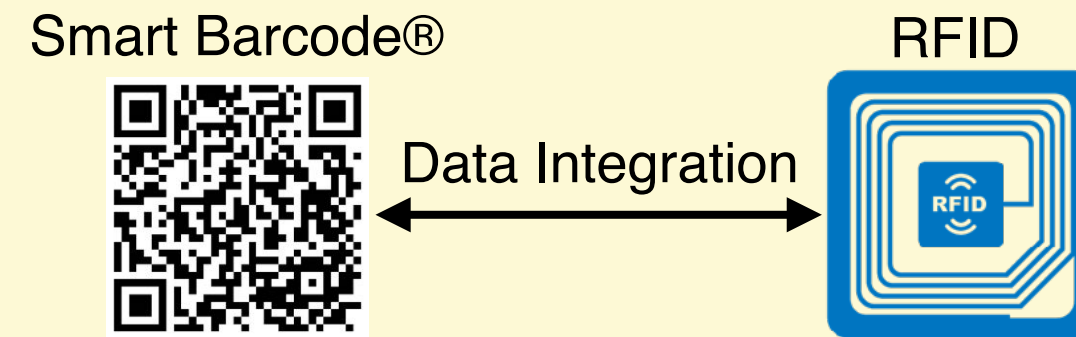
Batch reading of a large number of packages and unattended reading

Data Logger Tracking

Smart Barcode®   Bluetooth   Data Logger
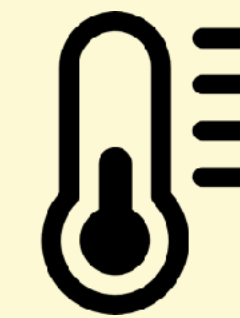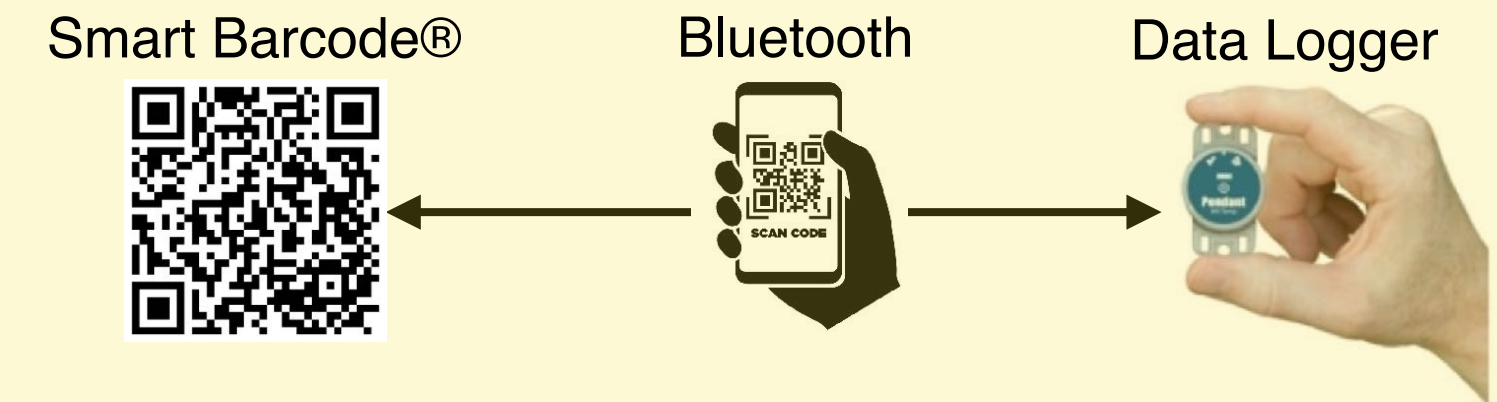
Temperature   Humidity   Illuminance

Measuring and storing information by reading bar codes

Warehouse IoT

Smart Barcode®

Robots   Smart Glass   Mobile Printer
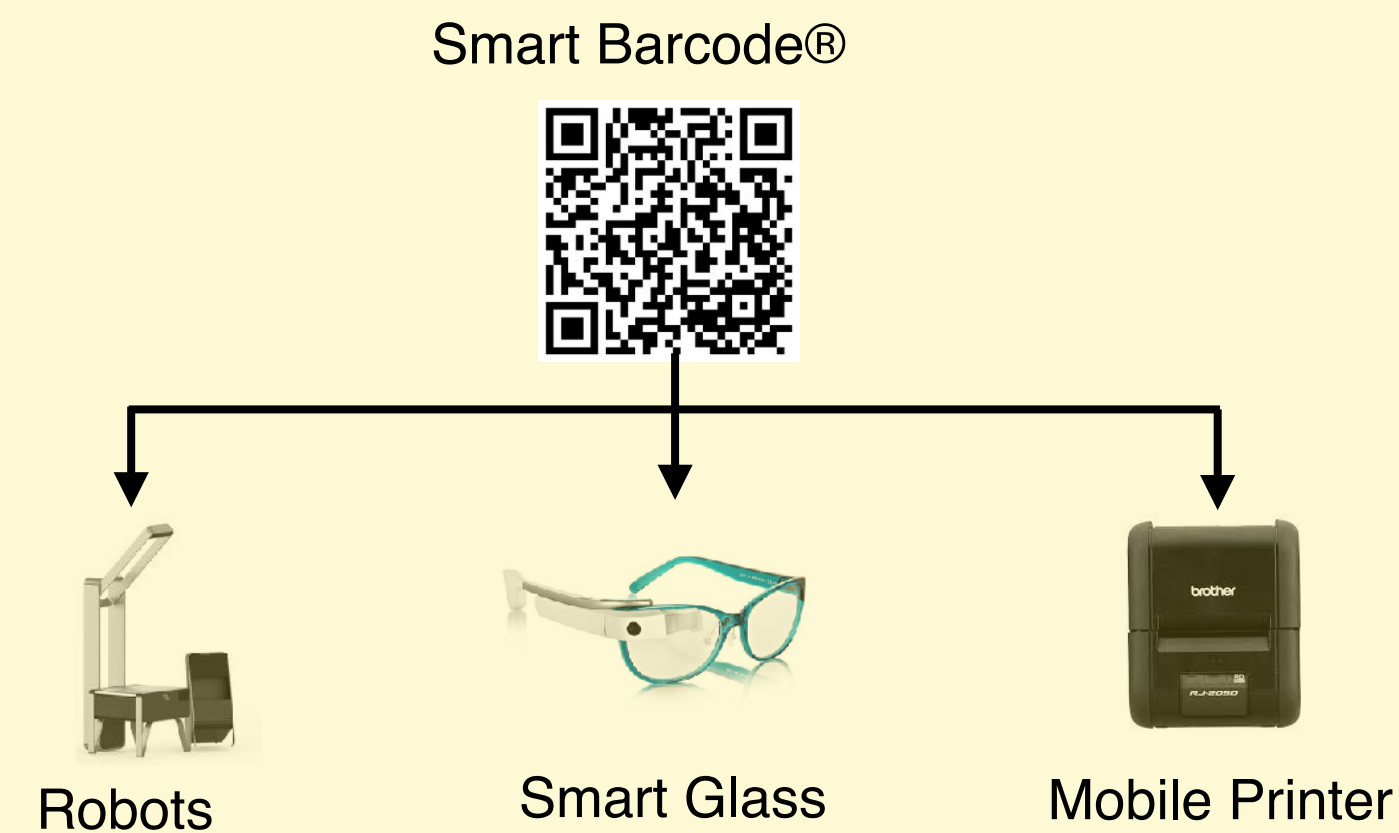
Interlocking IoT to make warehouse operations more efficient

OCR

Smart Barcode®   SmartphoneCam   Vouchers / Documents
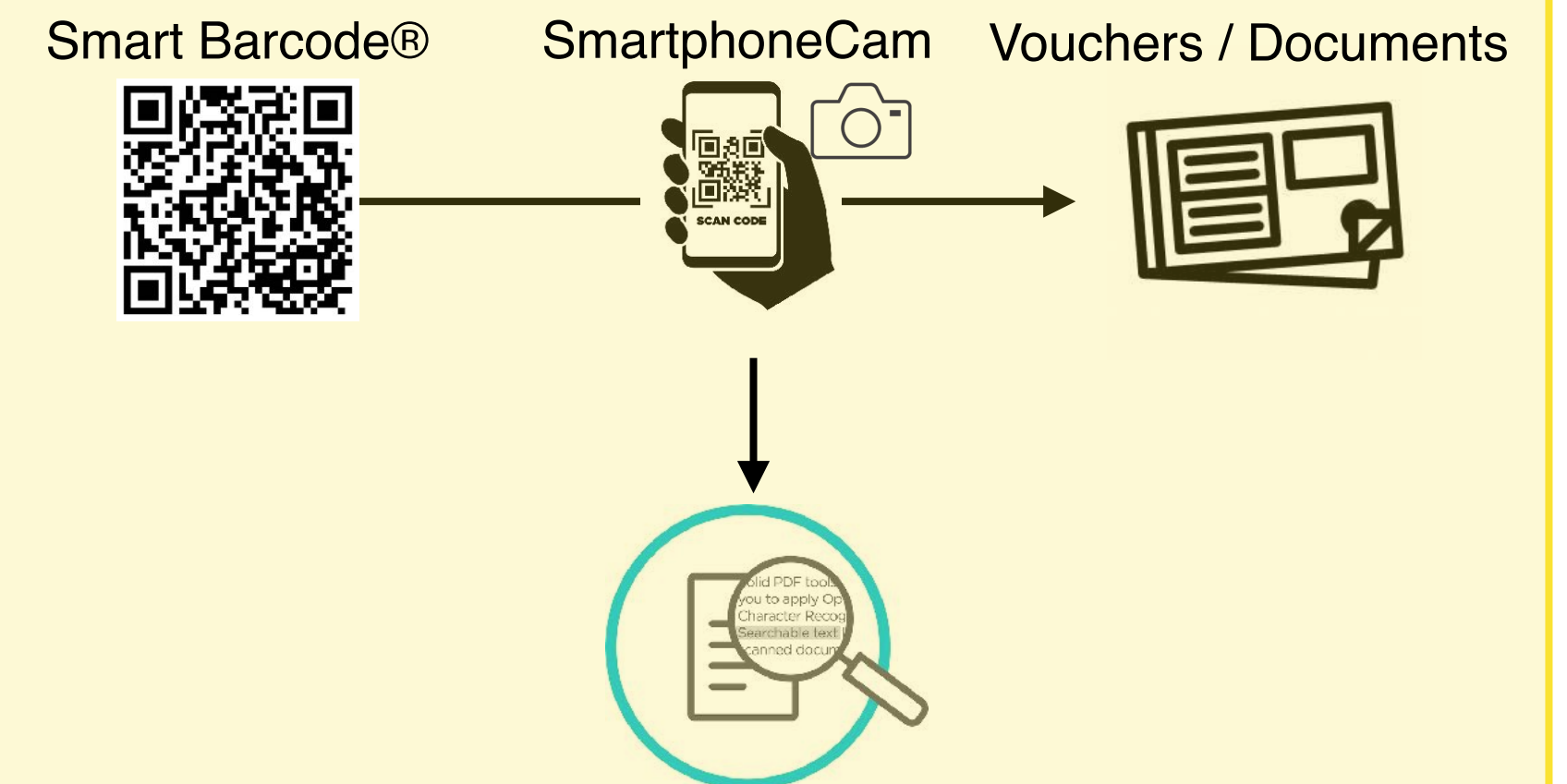
Digitization of paper slips

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Board Member

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CEO Martin Roberts (Japan)

·Leading a number of cross-border e-commerce projects in Japan, Korea and China
·Logistics Consulting

COO Hisao Morita (Japan)

·Over 20 years of experience in UI and UX design
·Creative Director

CTO Lee Jinwook (USA)

·Professor at Decision Sciences & MIS, Drexel University.
·Expert in operations research, information technology

OrganicSmart

CEO Martin Roberts

COO Neal Foster (USA)

·General Manager and Product management executive
·Leader of over 35 global product launches

CTO Lee Jinwook (USA)

Director Chiaki Takahashi (Japan)

·Former Deputy Foreign Minister
·Former Ministry of Economy, Trade and Industry Parliamentary Vice Minister
·Director of GGAP

Director Seo Lee (USA)

·MBA, Harvard Business School
·SV Investment Principal