



The Global Language of Business

The Movement towards Sustainable & Circular Supply Chains

Updates on 2D barcodes at retail point-of-sale

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Today's 2D Update brought to you by...



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Agenda

Update

Inspire

Address

The Movement towards **Sustainable & Circular Supply Chains...**

...necessitates **acceleration** of progress
towards **Ambition 2027**

Reminder: What is Ambition 2027?

There is a rapidly increasing demand for more information about the products we use and consume. To meet this demand, industry has set a goal: **By the end of 2027, all retail point of sale (POS) systems should be capable of reading and processing a defined set of 2D barcodes with GS1 standards, in addition to existing linear barcodes.**

As the transition to scanning of 2D barcodes with GS1 standards at POS progresses on different timelines across the globe, **brand owners should already be exploring and implementing the most appropriate 2D barcode to address priority use cases** for their products and meet critical consumer and business needs.



(01)09521101530001

**QR code
powered by GS1**



(01)09521101530001

GS1 DataMatrix



(01)09521101530001

Data Matrix



Global Migration to 2D at Retail POS Engagement

September 08,...



Engagement is taking place in **68 countries***, representing **92.35%** of world GDP.

Based on MO-reported data in the 2D insights tracker from **87 GS1 Member Organisations.*

81 % of reported engagement involves active 2D pilots and/or implementations.

Brand Owners

80

Top Global Brands Tracked

69

Engaged

25

Implementing

1113+ Brand owners participating in national 2D pilots and implementations#

Retailers

30

Top Global Retailers Tracked

24

Engaged

11

Implementing

356+ Retailers participating in national 2D pilots and implementations#

#Note that national 2D pilots or implementations may be being undertaken confidentially.



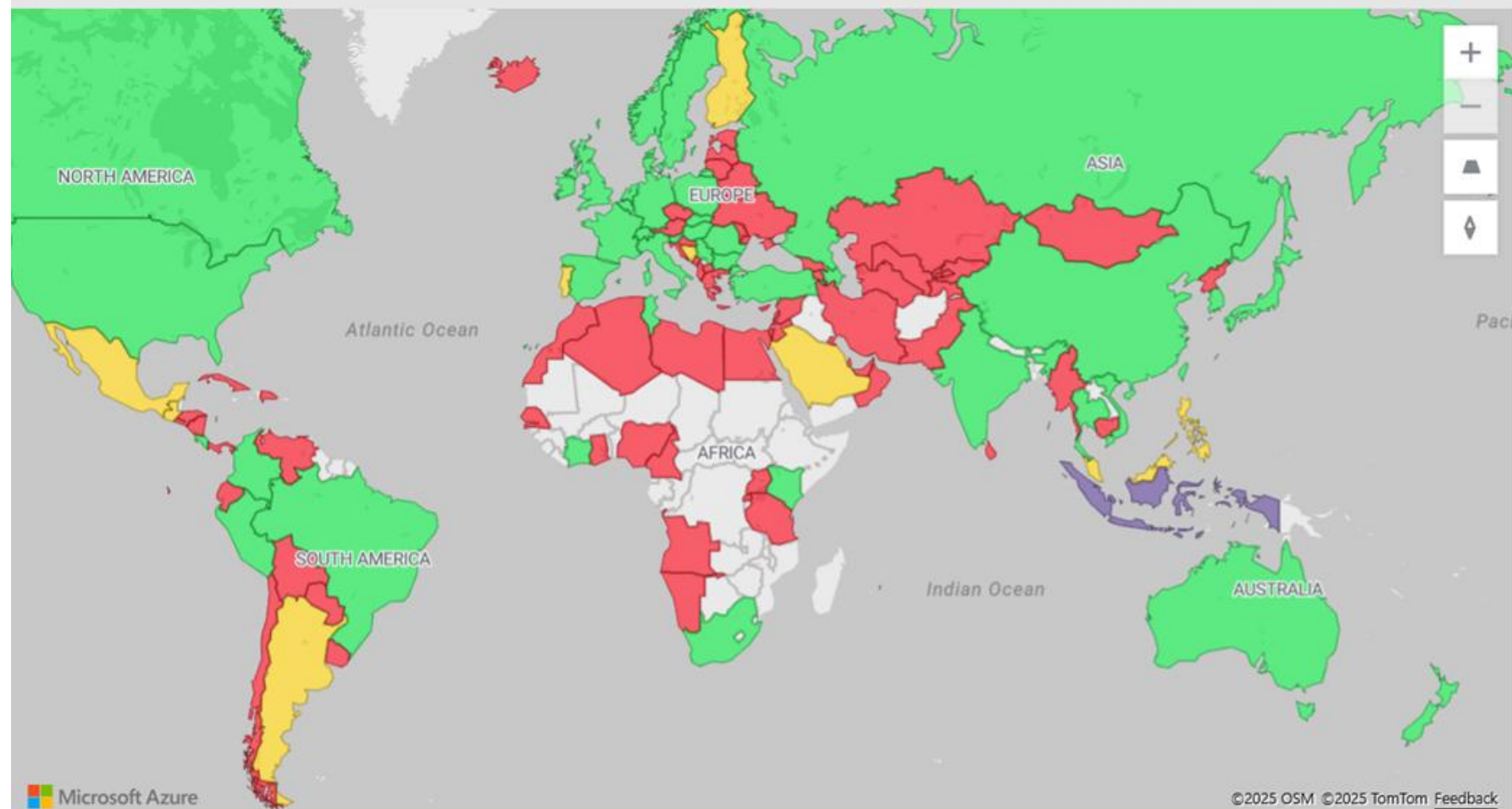
Implementation Heatmap

September 08,...



Legend (Engagement Status)

○ No MO ● No Data ● Pilots in-Progress ● Pilots Completed ● Implementations in-Market



Region (filter)

Asia Pacific

Europe

LATAM

MEMA

North America

Visual Interpretation Guide

- Visual is plotted based on data collected via MO feedback on local engagement and observations on:
 - Top 80 Global Brand Owners
 - Top 30 Global Retailers
 - Pilots in-Progress
 - Completed 2D Pilots
 - Implementations in-Market
- This is a very high-level representation of data where each country is assigned a colour based on the highest implementation status, irrespective of whether it was a retailer or brand owner that had been observed as having pilots or implementations in the country

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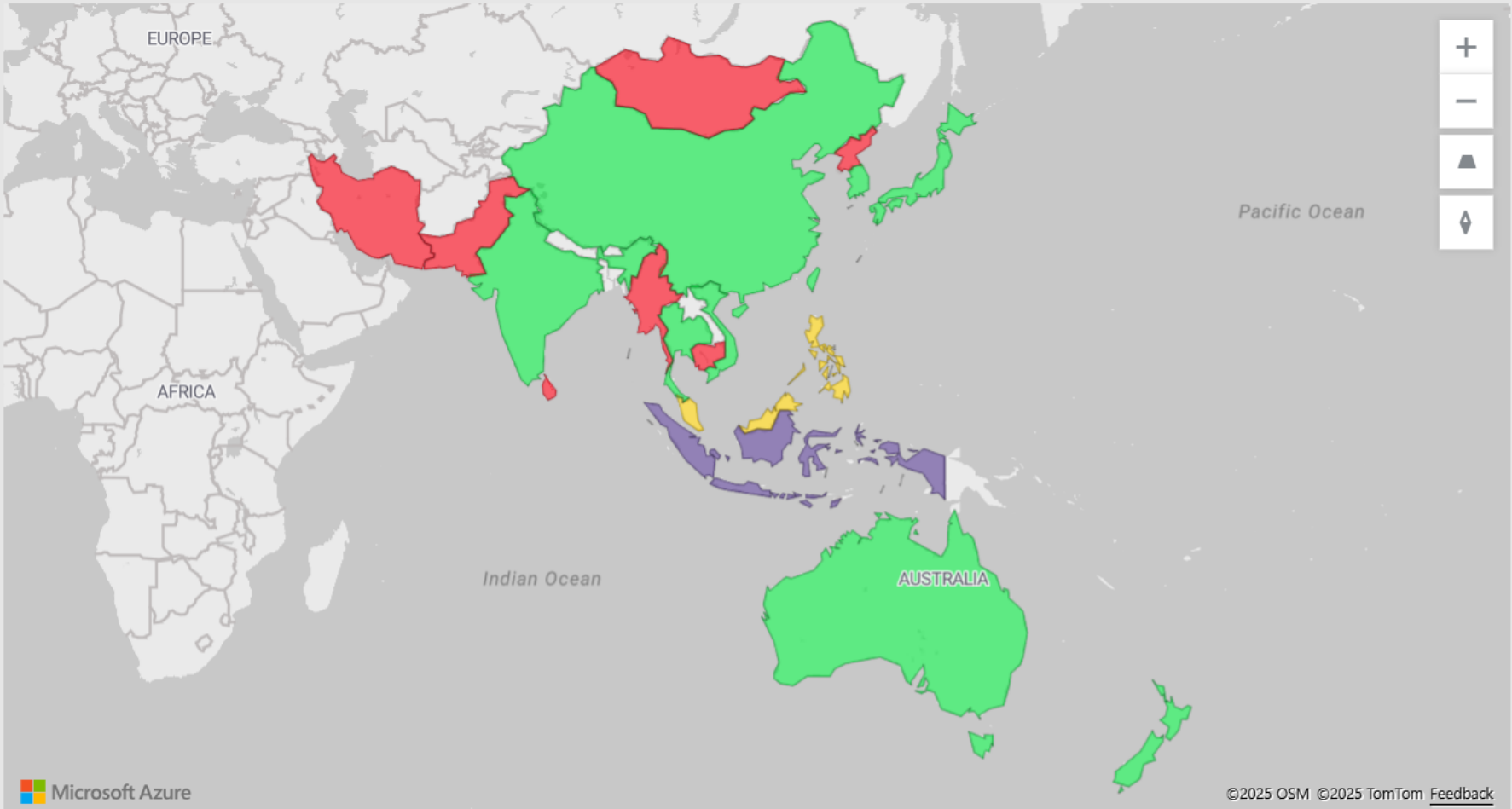
IMPORTANT

- While GS1 GO is managing the data collection for the MO 2D Insights Tracker, GS1 GO is not responsible for, and cannot guarantee the accuracy of any information submitted by GS1 Member Organisations or the reports based on such information.

Zoom in: Asia Pacific

Legend (Engagement Status)

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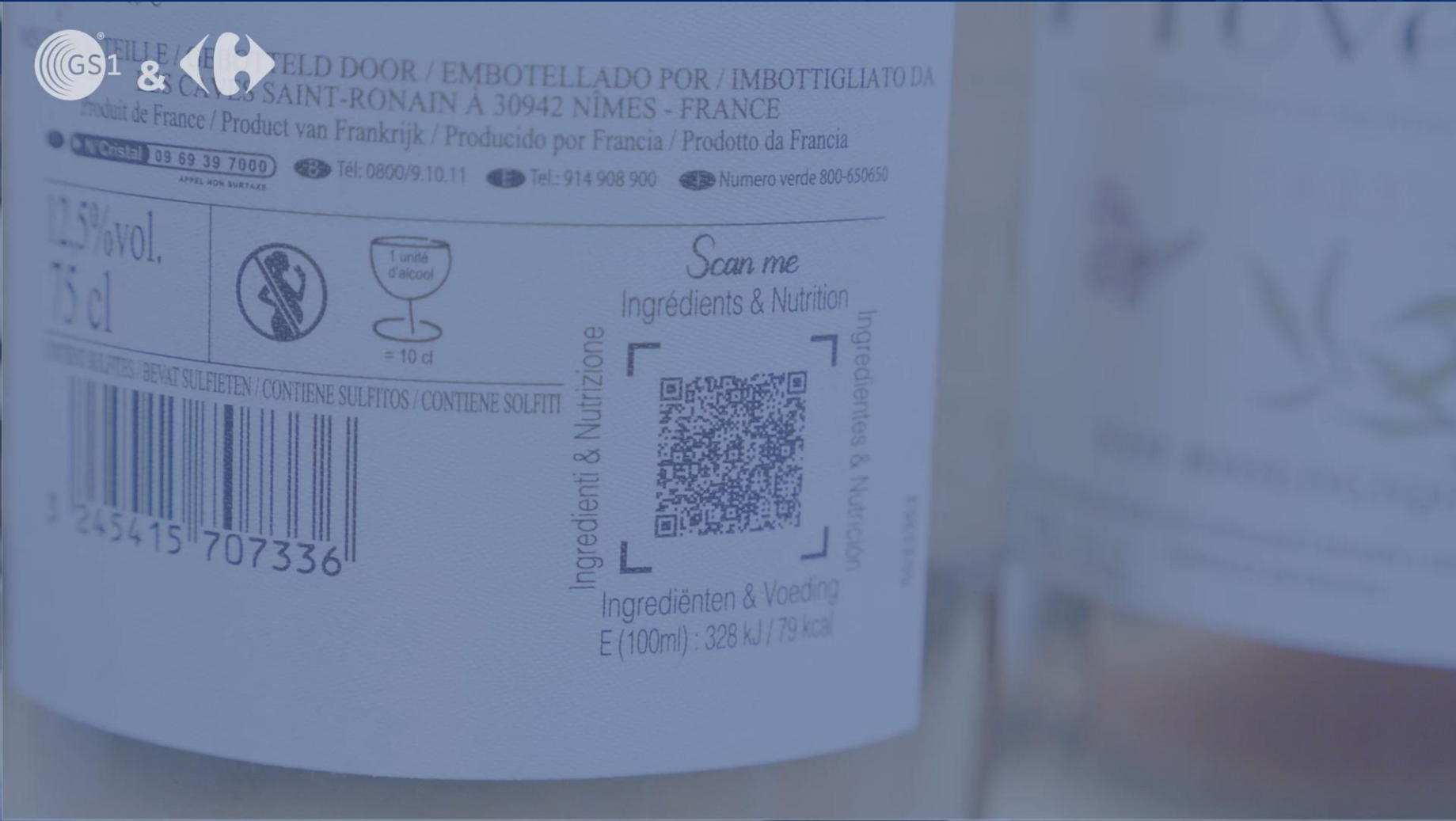
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Insight #1: Carrefour, France



Insight #2: Ghee Traceability, India

Overview

- India's National Digital Livestock Mission (NDLM) in partnership with GS1 India
- Address traceability issues in the dairy sector (E.g., source of milk and verification of cattle health)
- 2D Barcode used: **QR Code with GS1 Digital Link URI**



Scope

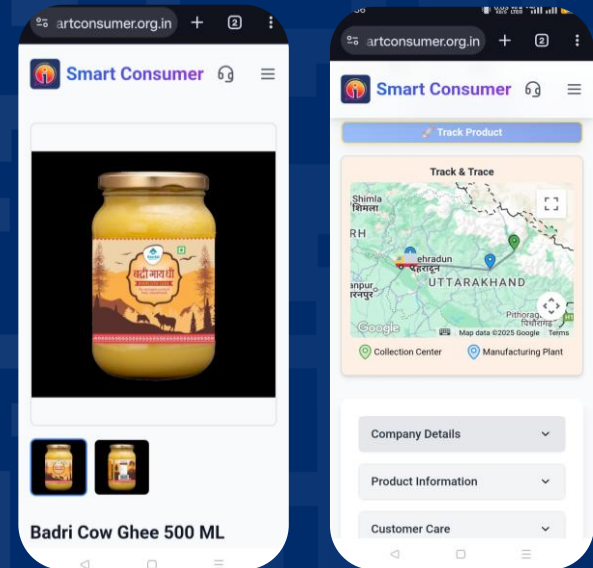
~10000 Dairy Farmers, ~20000 Cows
2 Milk Collection Centres covering 134 Village Collection Points
2 Manufacturing Locations
~11 million Litres of Cow Milk, ~200 thousand Kilogrammes Cow Butter
~ 8 thousand Litres of Premium Gir Cow Ghee



Insight #2: Ghee Traceability, India (cont'd)

Outcome

- Consumers can trace the origin of products to the specific village, farmer, and cattle from which the milk is sourced.
- Bharat Pashudhan by National Digital Livestock Mission (NDLM) allows verification of the cattle's health status.
- ~16,000 units (500ml each) of products in market
~ 6,000+ consumer scans using the Traceability QR Code on product.
- Demonstrated technical feasibility of traceability solution in dairy sector to government and industry



Insight #3: Consumer Engagement, Indonesia

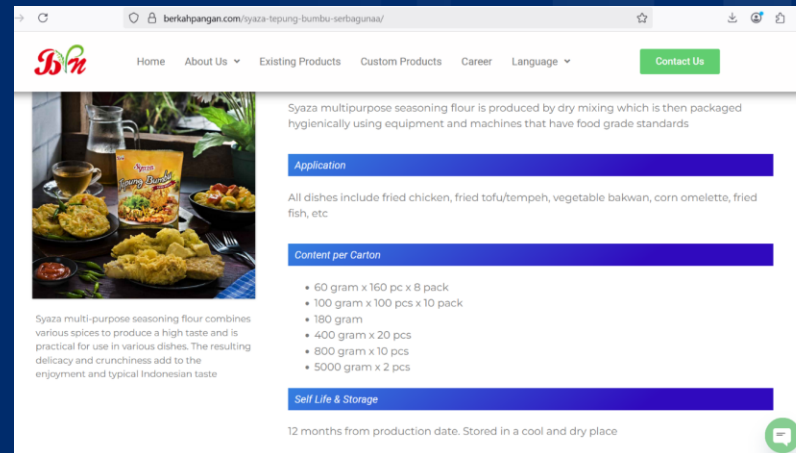
Overview

- Micro SME (Berkah Pangan Nusantara) looking for ways to improve consumer engagement
- Having just a simple QR code pointing to brand website wasn't effective
- 2D Barcode used: **QR Code with GS1 Digital Link URI**



Outcome

- QR Code on each product configured to redirect to specific product webpage
- Ensures relevance for increased consumer engagement



Other Interesting 2D Insights

GS1 Netherlands & GS1 Pakistan - SockLab® biodegradable socks

- Traceability and transparency throughout the product lifecycle – from design to disposal
- Each sock has a QR Code powered by GS1 linking to its digital identity
- Key information: materials, production, environmental impact
- Allows consumers to track product from sourcing in Pakistan to global supply chain partners
- 2D Barcode used: **QR Code with GS1 DataMatrix**



GS1 Poland – Żabka (retailer) in partnership with Biedronka (brand)

- To ensure product freshness, improved inventory management and meet increasing consumer demand for transparency
- Transformed retailer's inventory management, improved product tracking and enhanced customer safety
- Rolled out across more than 11,000 stores
- Increased Żabka franchisee satisfaction by 47%
- 2D Barcode used: **GS1 DataMatrix**



An **important shared characteristic**
across all these case studies...

...the **2D barcodes** still go ***"beep"*** at point-
of-sale!

Some Fundamental Must Knows



Brand Owners/ Manufacturers

How do I know
which barcode
to use?



Retailers

What needs to be
done for my POS
scanners to be
considered ready for
Ambition 2027 at
retail POS?



Solution Providers

How do I support my
clients as they
migrate to 2D
barcodes at retail
point-of-sale?

Thank you for your time and attention!

