

Retail

Reimagined

7-8 & 14-15 June

The future
of retail is
sustainable.

What does
it take to
get there?

Agenda

- 14.00–14.05** Opening
- 14.05–14.40** Interview: Who should be leading on eco-education? The power of labels to change behavior
- 14.40–15.00** Carbon footprint and labeling: The next frontiers in retail transparency
- 15.00–15.20** Countering counterfeits: Digital labels and traceability in the age of e-commerce
- 15.20-15.25** Close of the event



Interview: Who should be leading on eco-education? The power of labels to change behavior

Agenda

- Understand the concept of eco-education and who should be responsible for end-of-use. Is it manufacturers? Recyclers? Associations?
- How labels are becoming crucial sites of knowledge for consumers when it comes to transparency and end-of-use information
- How digital IDs can be a source of customer engagement and information for sustainable disposal



Nick Dormon
Managing Director,
Echo Brands Design



Q&A

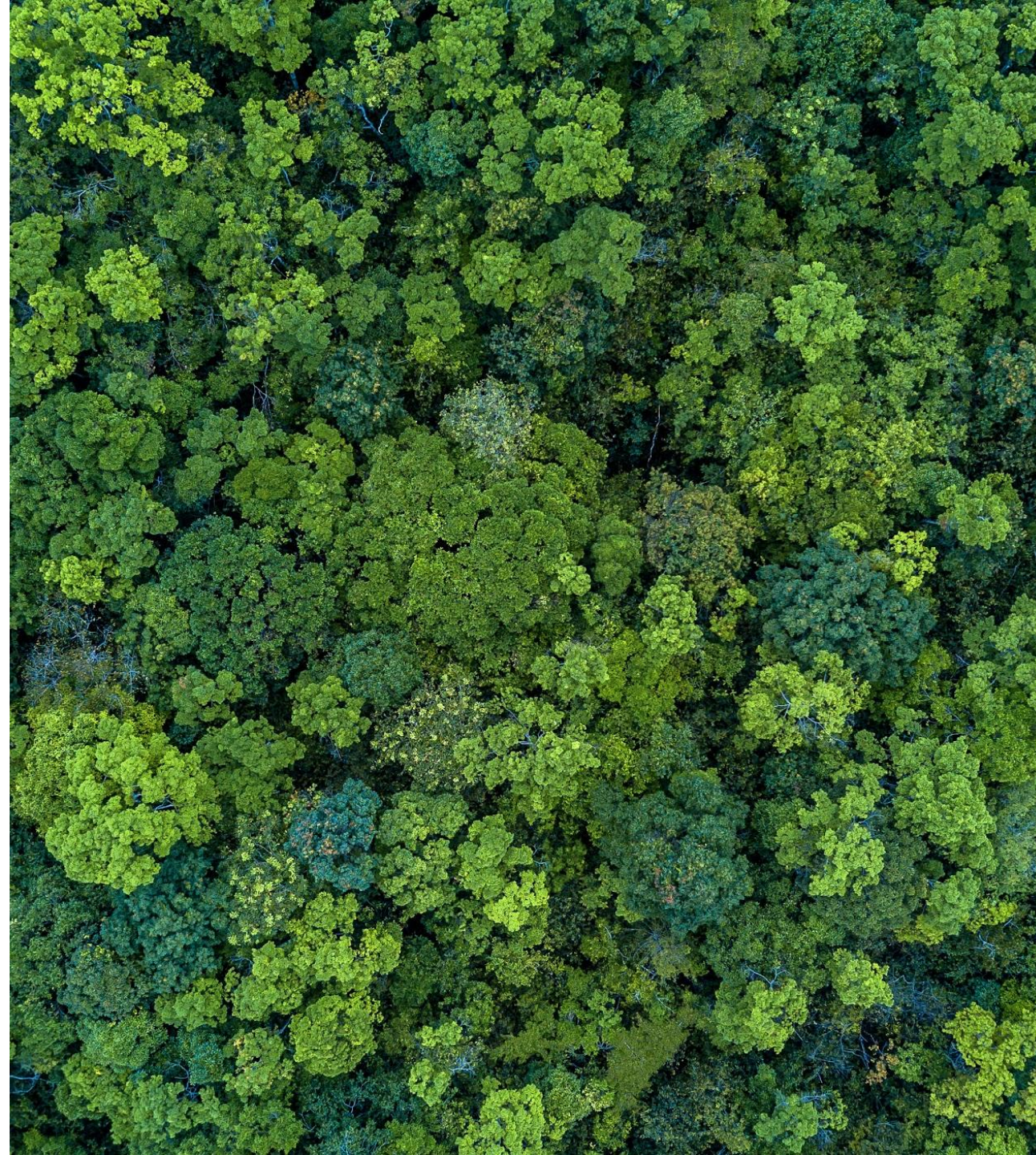
Carbon footprint labeling: The next frontiers in retail transparency

Agenda

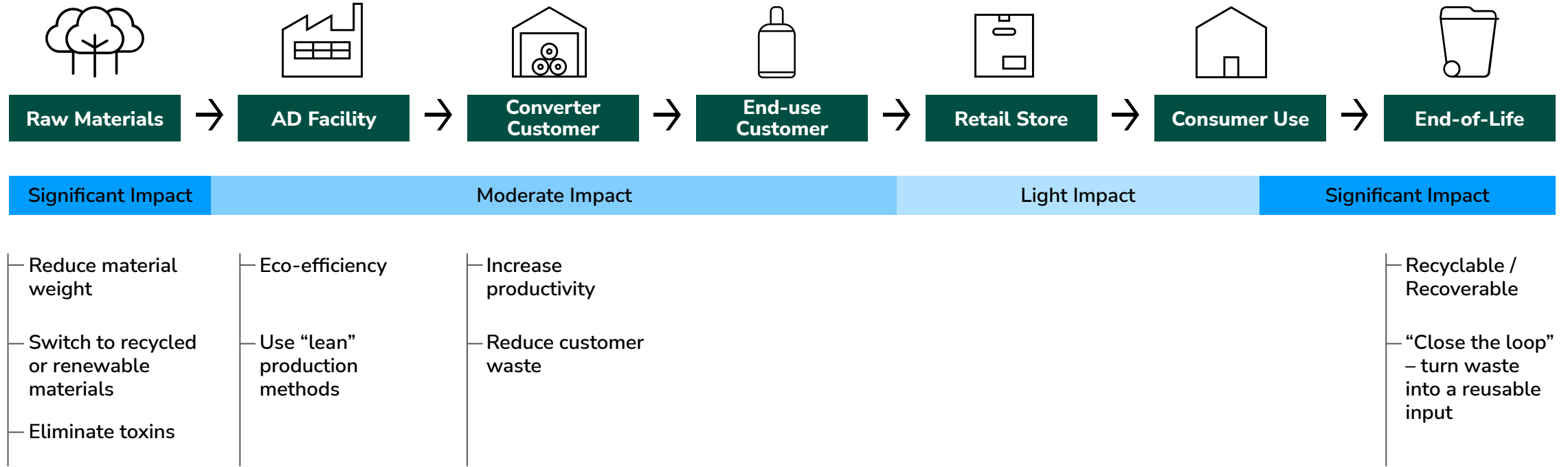
- Understand the trend for carbon labeling – what it is and why it is here to stay
- How sustainable materials can impact a package's carbon footprint
- How atma.io can deliver on transparency demands for better understanding of a product's carbon footprints and lifecycle analysis



Gabrielle Armstrong
Global Sustainability
Manager,
Avery Dennison



Carbon Footprinting - Here to Stay



Life cycle assessment

LCA is a cradle-to-grave or cradle-to-cradle analysis technique to assess environmental impacts associated with all the stages of a product's life, which is from raw material extraction through materials processing, manufacture, distribution, use, and final disposition. These can be used to determine the pluses and minuses of product construction. A particular focus on GHG emissions and Carbon Footprint has arisen due to the expansion of emissions in a product's value chain and a drive for advancing circularity.

Carbon Footprinting - Here to Stay



Scope 3

80% of consumer emissions reside in supply chains. To meet the pathway to net zero, CPG companies need to work with their suppliers to secure green raw materials and supply.

If CPGs intend to meet the current EU climate targets, GHG emissions will need to be halved by 2030. With increasing prosperity and consumption in the coming years, new business models—especially those relating to the circular economy—will gain increasing consideration

Circularity

With 98% of plastic materials being made from virgin materials, there is a large opportunity to recover value with the advancement of the circular economy.

Design thinking reinforces circular economy principles in product development for cradle-to-cradle understanding of impacts.

Efficacy of Carbon Footprinting

The European Union's Green Deal provides for all packaging in the EU area to be reused or recycled by 2030. With this, accurate and consistently reliable carbon footprinting data needs to be available across value chains to understand areas of high impact.

Sources: [McKinsey & Company](#) and [Ellen MacArthur Foundation](#)

Avery Dennison's Evolution of Impact Management

2016-
2020+

Legacy Greenprint

(Avery Dennison Environmental Impact Tool) is used to predict impact across 6 categories; data inputs are based on industry averages.

2021

Eco-design

was launched as an internal process to develop products with sustainability in mind; concrete criteria and guidelines are continuing to be developed for full use in 2022.

2022

The Carbon Trust tool

to be launched for carbon and water footprinting use as per regional stakeholders needs beginning Q2 2022 for ~70% of the LPM products; this certifiable tool has options for “reducing” and carbon neutral certification options over the coming years.

2015-
2030

Sustainable ADvantage

(formerly ClearIntent) is Avery Dennison's product portfolio with sustainable focus across 5 categories; moving forward, a key focus will be around advancing low-carbon circular products.

Carbon Accounting and Product Measurement



HISTORY

The Carbon Trust was created in partnership with the UK government to work with public and private sector organizations to accelerate transition to a low carbon economy including allowing companies to provide third party assurance of carbon measurement, reduction and neutrality claims.



SERVICES

Carbon Trust offers bespoke product carbon footprinting solutions as well as a suite of verification and assurance services for certification of the model as well as specific product carbon footprints. This provides a credible resource for reference for our customers



A GOOD FIT

Carbon Trust offers a unique opportunity for us to provide primary data from our raw materials and operations to truly measure the impact our current and future products.

How does Carbon Trust product certification work?

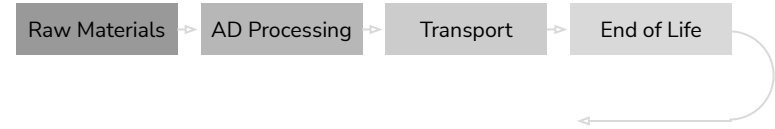
Carbon Trust's certification options follow the Paris Climate Agreement (and SBTi's) pathway for carbon reduction. A "Reducing" certificate must first be obtained by documenting evidence of carbon reduction efforts for a particular product. A "Carbon Neutral" certification can be awarded when the remaining carbon impact of a product (after reduction efforts) is offset through a credible source.

Making Product Selections Easier

Tool Features

- ✓ PAS 2060 Certification of Model
 - ✓ Measure custom products by selecting three components (face, adhesive, liner) including options for recycled content
 - ✓ Consider end of life for the label selection
 - ✓ Calculation of product impact by Region with AD operational data and sourcing practices
 - ✓ Scenario analysis for comparing multiple product options to discuss trade offs
 - ✓ Ongoing development to meet customers' needs now and in the future
-

Avery Dennison Carbon Trust Tool



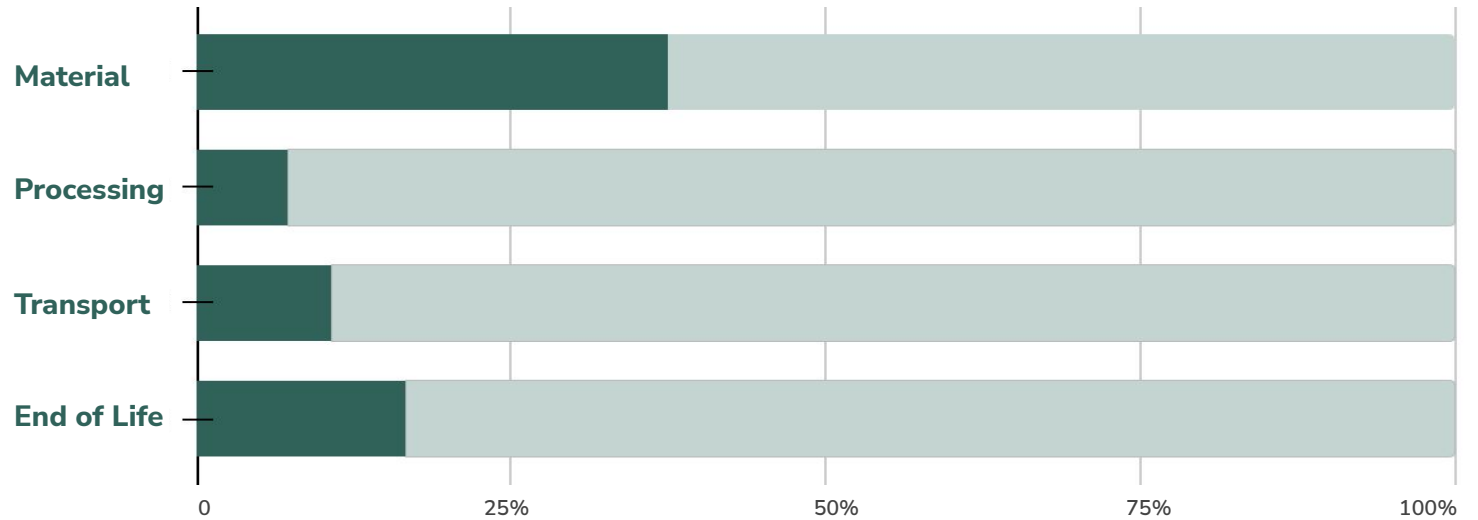
Product:

ABC-123-987-XYZ

0000-Face Name or Code Here

0000-Adhesive Name or Code Here

0000-Liner Name or Code Here



Water Use



Carbon Impact

Impact:

00000000

00000000

Results may be displayed with several significant figures, but do not imply a corresponding level of precision. This model by Avery Dennison has been certified by the Carbon Trust. Model outputs do not constitute a certified product/organisation footprint.

Scope: XXXXXXXX XXXXXXXXXXXXXXXX
 Region: XXXXXXXX XXXXXXXXXXXXXXXX
 Author: XXXXXXXX XXXXXXXXXXXXXXXX

This calculation is valid for one year after after date of being published.

Carbon Footprinting - Digital Traceability



A Data Journey

With a continued push for reduction, understanding the true impacts of a material's life cycle within your value chain is critical to capturing improvement and identifying hotspots. Today, many companies rely on LCA databases with industry average values as they do not have primary data available for review.

Atma.io

Powered by pioneering capabilities to track a product's raw materials, the story of everyday items becomes a single source of truth, where a product's origins and its entire journey can be chronicled and made available to brands, retailers, and consumers. This is the power of connected products, delivering end-to-end transparency for new business models that are both profitable and sustainable.

Transparent Engagement

Developing a clear understanding of high impact areas provides opportunities to engage internally and across the value chain. As our industry moves towards measurable reduction of environmental impacts, reputable tools and certifications play a large part in a shared language and actionable roadmap development. The right partners accelerate this journey.

Q&A

Countering counterfeits: Digital labels and traceability in the age of e-commerce

What will we cover?

- Understanding the consumer desire for traceable and verifiable products - the counterfeit market
- Bringing it all together: Learning how digital IDs can ensure a traceable flow of goods and help brand owners battle counterfeiting



Harald Minrath
Market Development
Director IL/Rfid,
Avery Dennison
Central Europe

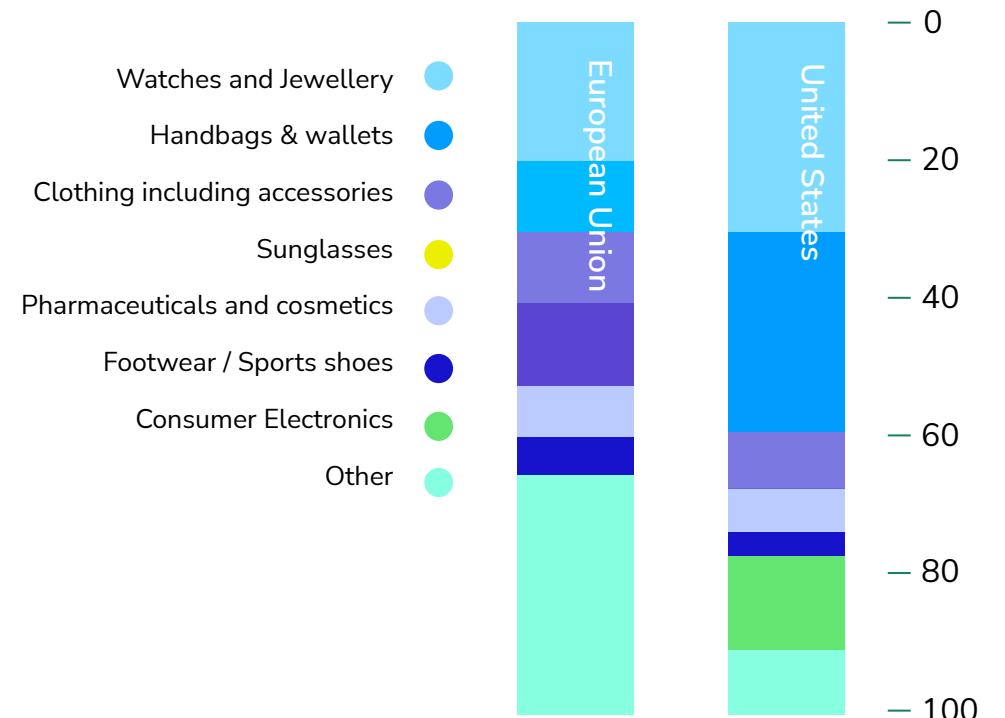


About the Counterfeit Market

- The counterfeit market costs the industry and 460 B USD worldwide, 2,5% of international trade. 5% of items in Europe are counterfeit
- Targeted Brands locations: US (20%), Italy (14,6%), 12,1% (France), Switzerland (12%)
- Targeted goods: Pharmaceutical, electronics, luxury items (bags, wallets, watches), footwear, clothing, leather (see graph)
- Origin of majority of counterfeit goods: China, Hong Kong, Vietnam, Turkey, Thailand
- Main emerging channel: Online (30.3 B usd out of 323 B USD in US in 2017) - [Instagram](#) example

Types of counterfeit goods seized at borders:

Latest available, % by value



Sources: US Department of Homeland Security; European Commission

Brand Protection

Definitions & terminology



To ensure products are sold in the legitimate market, brands can protect themselves in multiple ways:

Package integrity

Product authentication

Supply chain transparency

Validation of sales channels

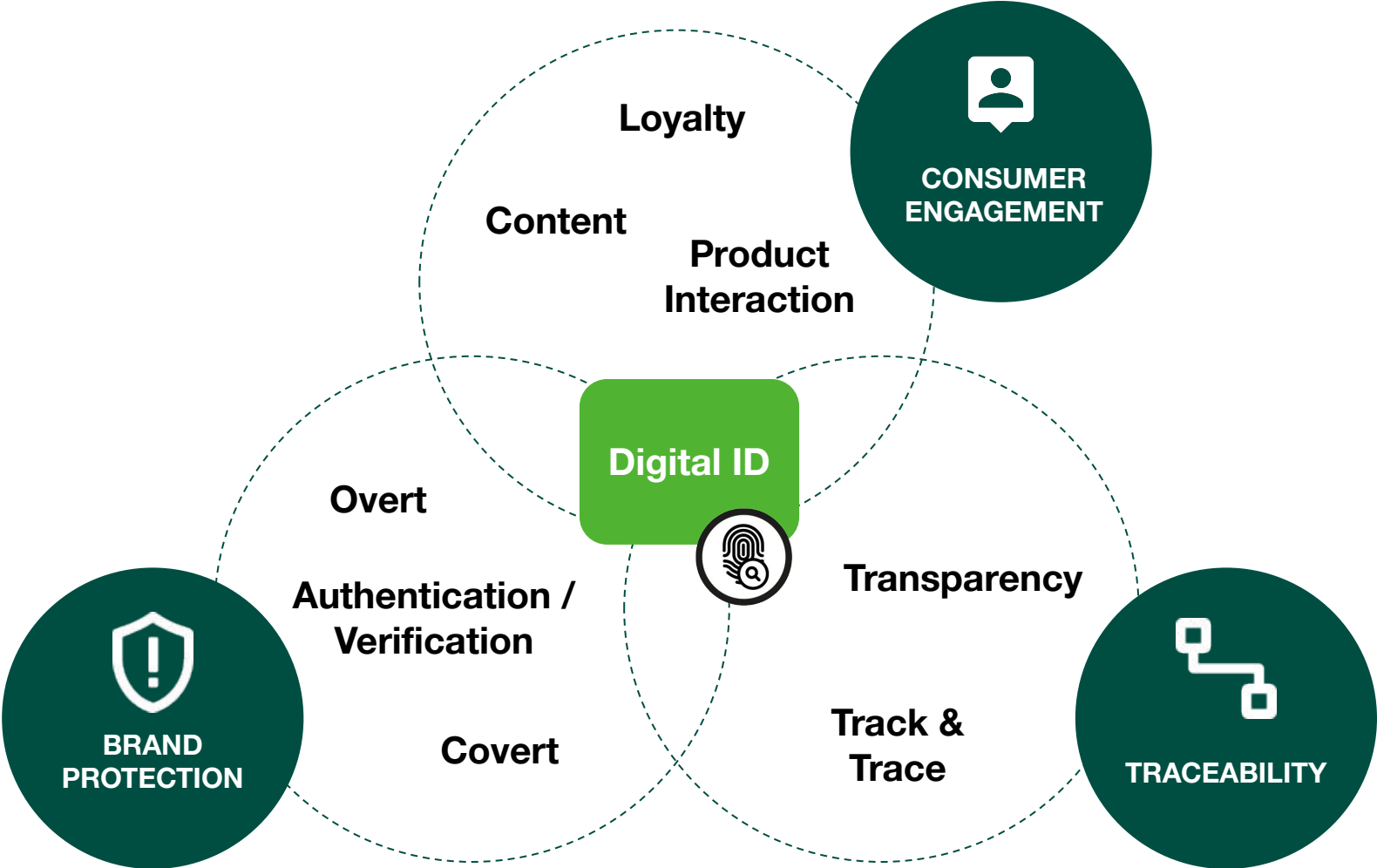
Monitoring and measuring



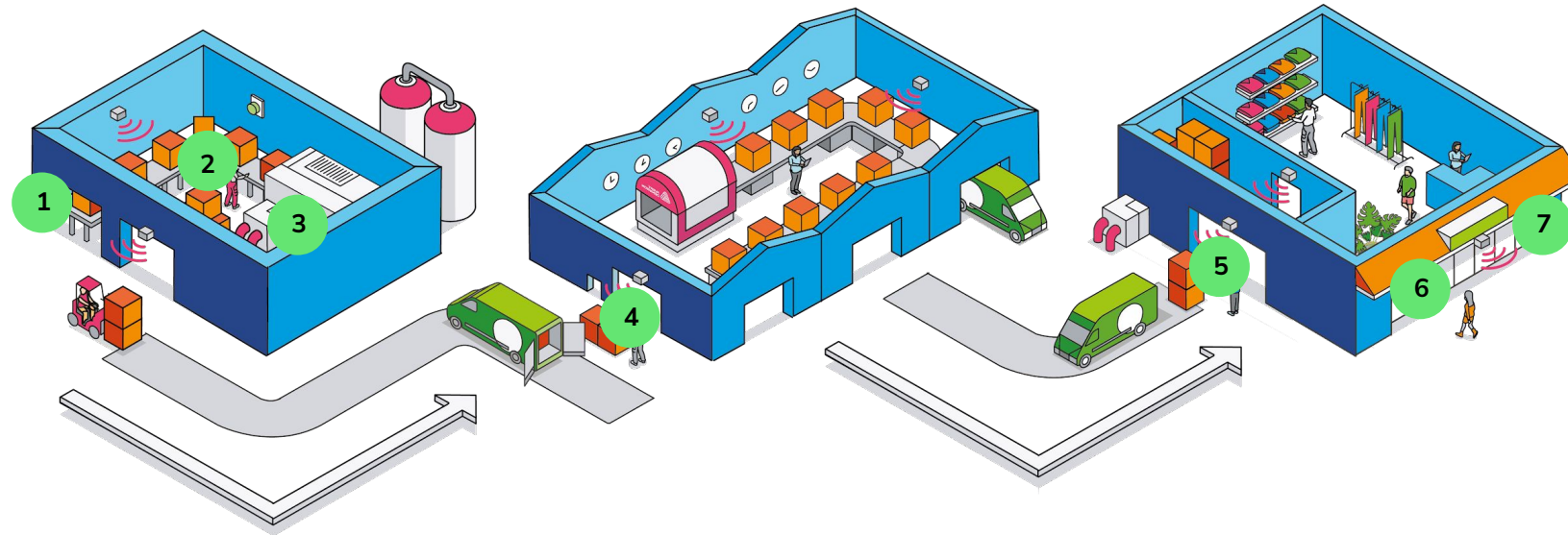
Layered Solutions

Brand Protection

BP Serialization + Digital ID to Unlock Multiple Use Cases



Our solutions: End-to-End Supply Chain



1

Care labels and price tickets printed on demand or ordered from service bureau

2

Tag production is controlled to eliminate overproduction

3

Overt and covert security technologies are integrated to enable authentication

4

Product authenticity confirmed from inspection of Overt / Covert Security Solutions on incoming trim items

5

Product authenticity confirmed from inspection of Overt / Covert Security Solutions on incoming trim items

6

Authenticity of returned merchandise verified

7

Merchandise authenticity verified by customers through inspection of garment trim with overt security features

Brand Protection & Traceability

AD Trace™

What

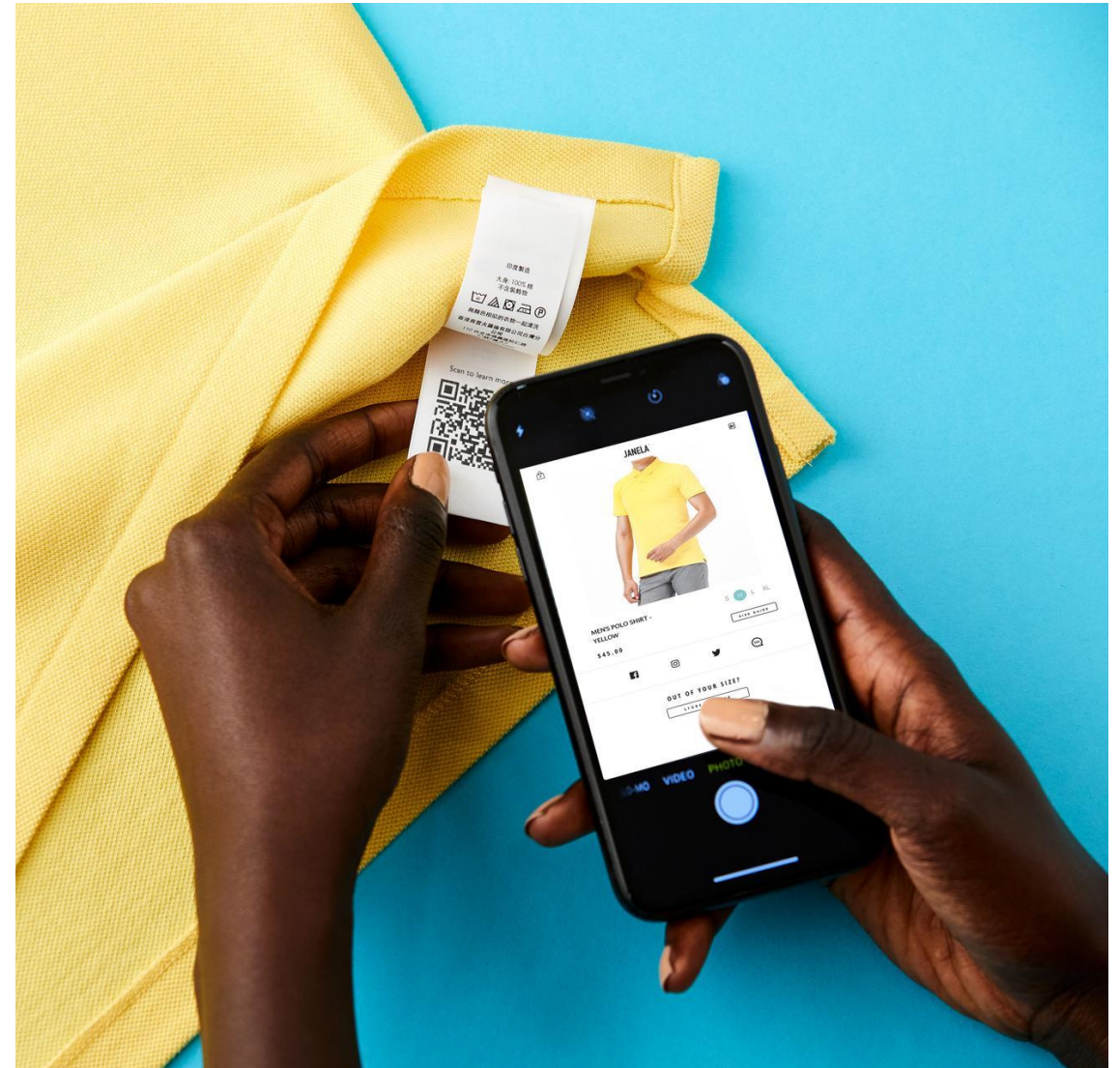
- Record securely the history of critical supply chain steps with a unique digital ID
- An ideal solution for supply chain traceability & transparency
- Enabled by Avery Dennison's Digital ID Platform

Why

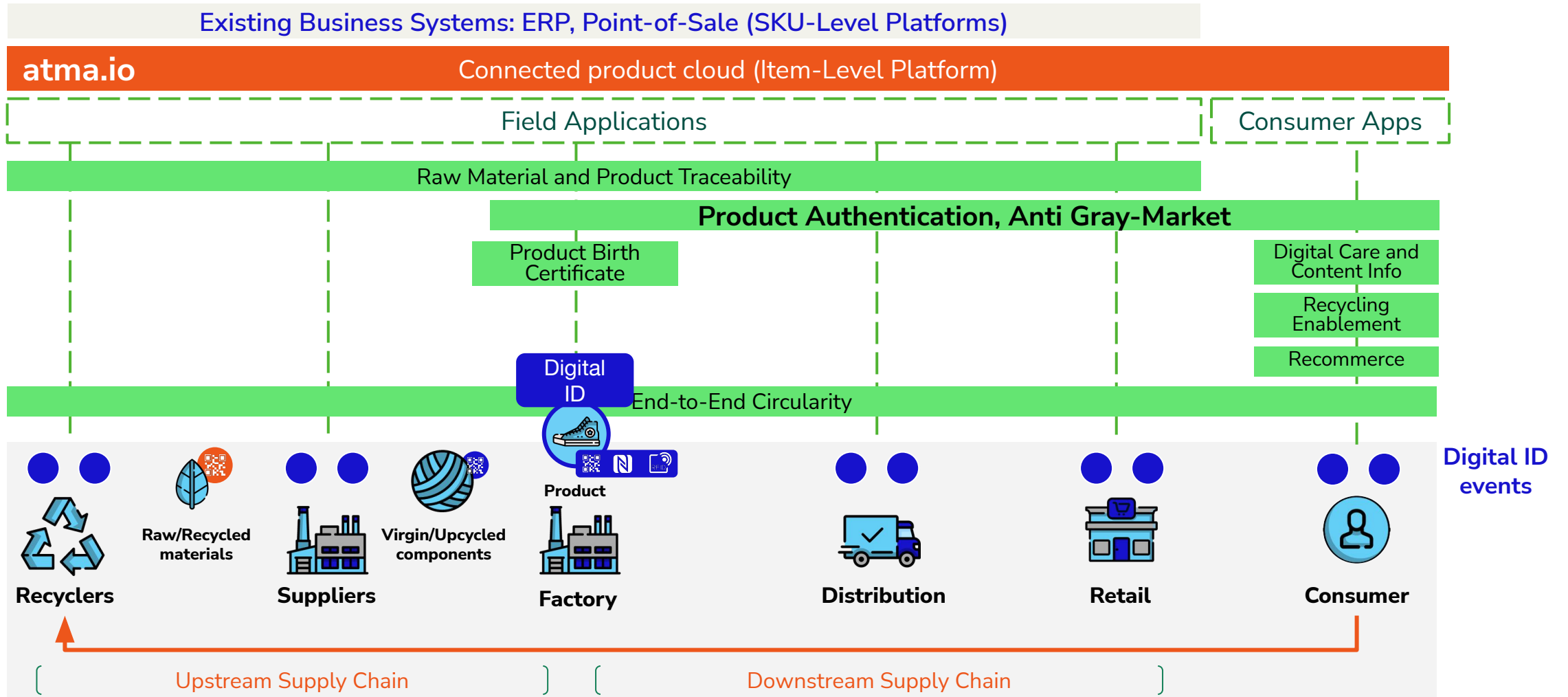
- Instant sourcing and authenticity information on the garment to:
 - Monitor and control channels
 - Enable second hand market processes
 - Reuse and repurpose garments
 - Brand protection

Consumer Engagement

- Instant product sourcing and authentication contribute to purchasing decisions
- Loyalty programs rewarding recycling and second life for garments



Brand Protection & Traceability
End-to-end visibility and traceability through a Digital ID platform

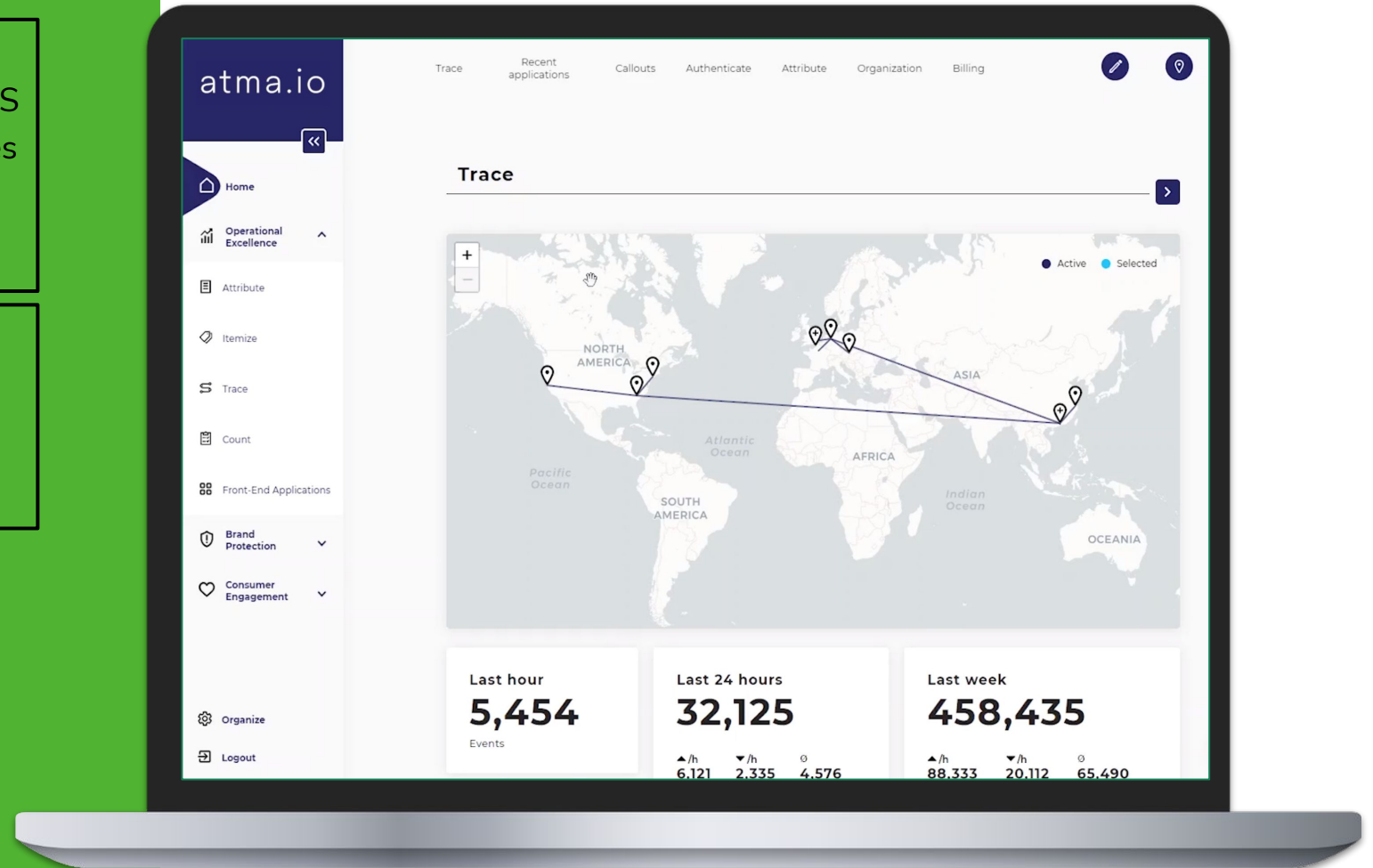


What does atma.io Trace do?

- Store and manage events (following EPCIS standard) as a result of business processes conducted with / on individual items and groups of items

Use cases enabled:

- Product traceability
- Diversion management
- Consumer and product interaction



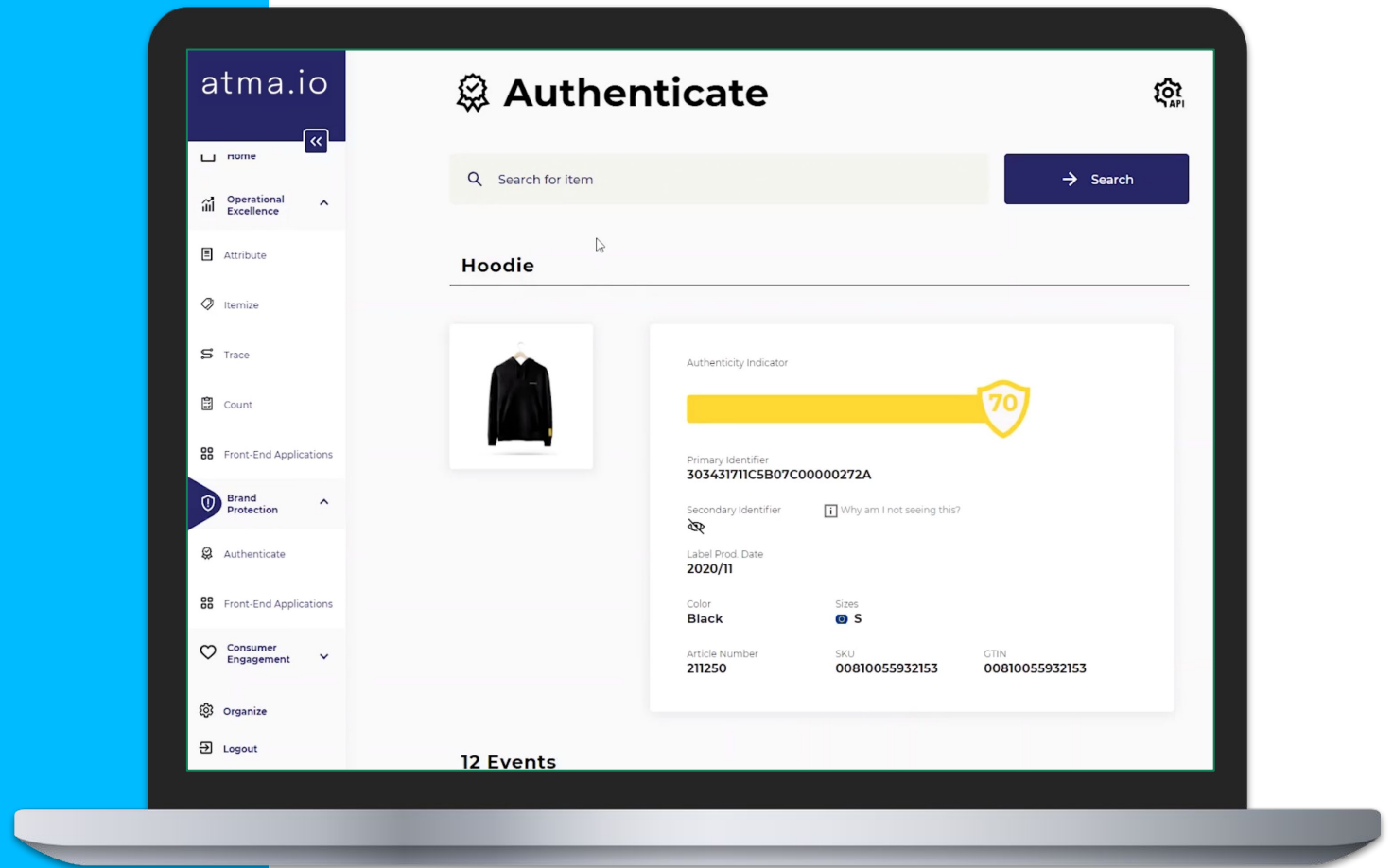
Brand Protection & Traceability
Authentication with atma.io

What does atma.io Authenticate do?

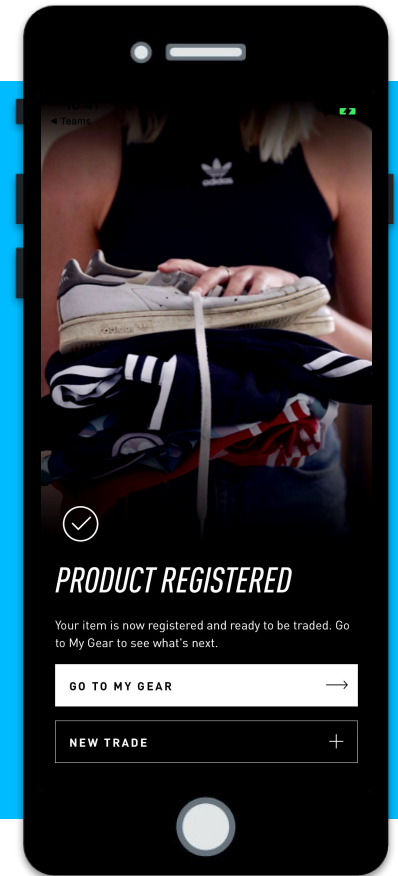
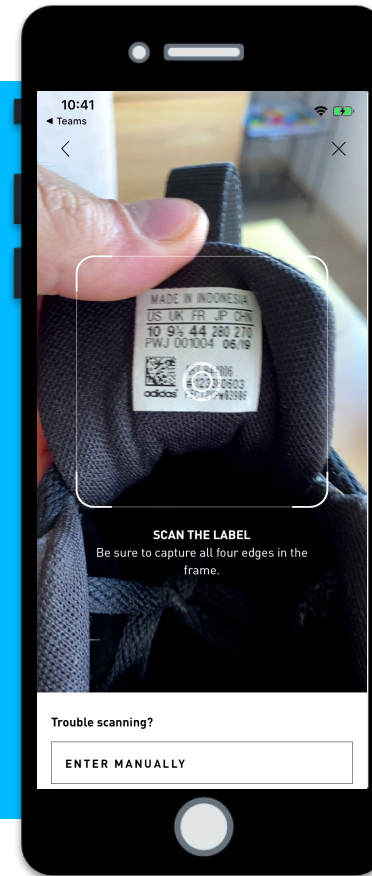
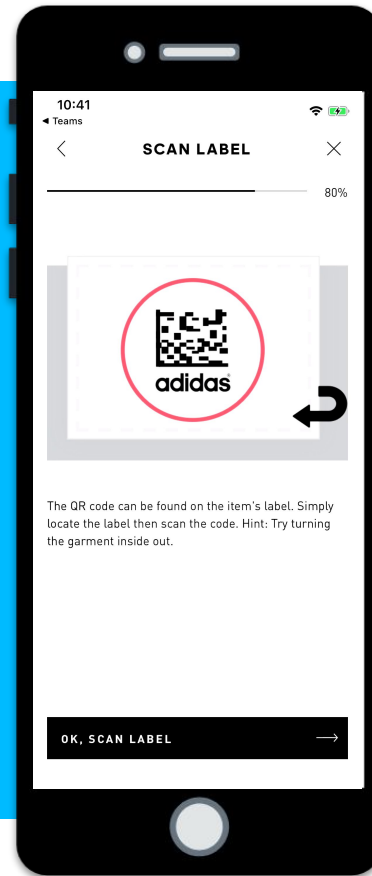
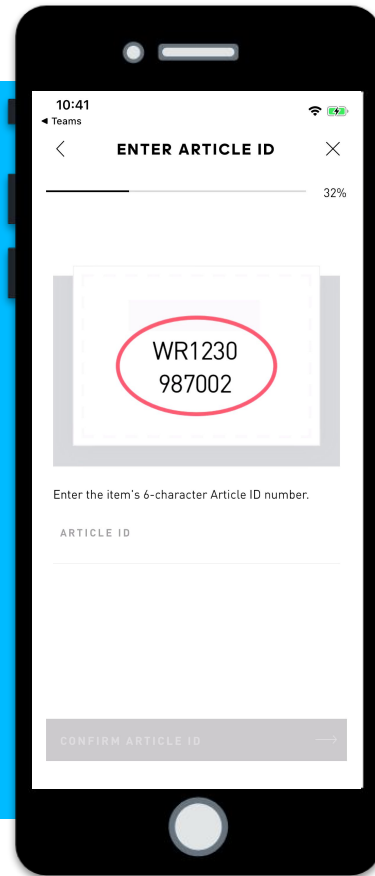
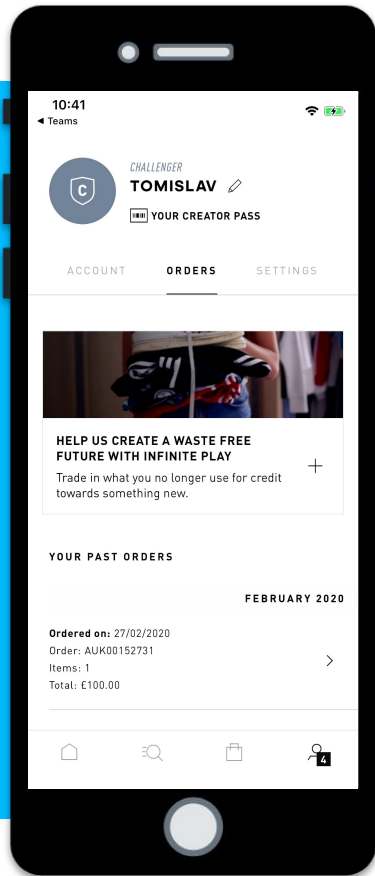
- Analyze specific brand protection related info and add'l product info (e.g. images, label, track + trace info) to determine authenticity

Use cases enabled:

- Product authentication



Example: adidas Infinite Play



Q&A

Thank you

