

White Paper

Why Winning Retail Brands Prioritize Transparency (And How They Do It) Part 1

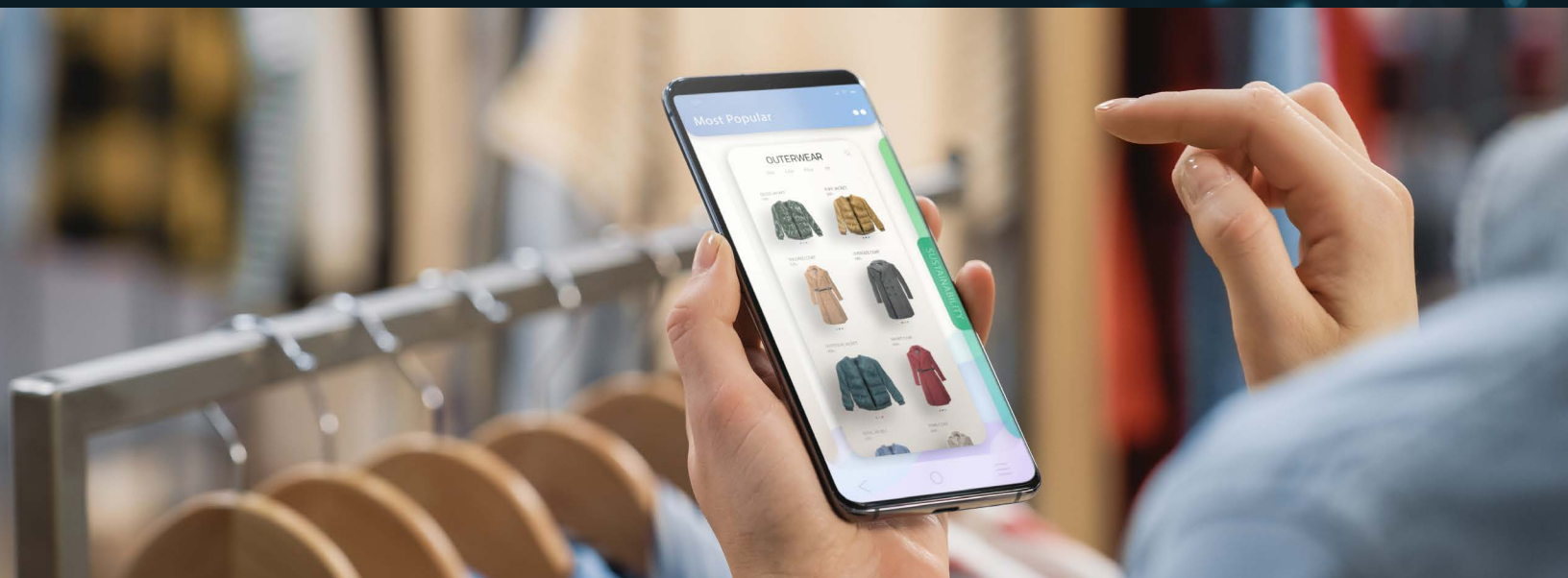
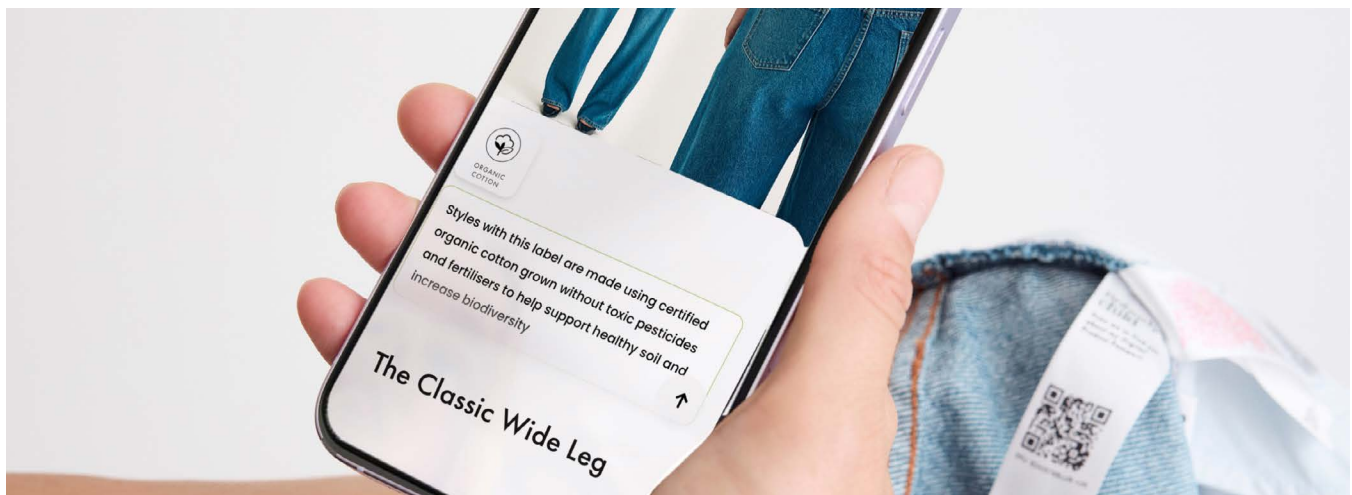


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Part 1: Digital Product Passports and Item-Level Traceability

An alarm blares—another day begins.

Your customer gets out of bed, throws on a robe, and flips through their closet. Their favorite shirt softly sways on the hanger. They love it not only because of the fit but also because of how it makes them feel.

They know how the shirt was made (and the working conditions of the people making it), the sustainable materials that comprise its structure, and the journey it took from a string of fabric to a finished product hanging on a rack.

Sometimes, a shirt is just a shirt, but for many modern buyers, it's so much more. Today's shoppers care about the transparency of the items they purchase, from clothing to food to household goods and more. In fact, nearly **64% of shoppers** would switch from a brand they usually buy to another competitive option with more in-depth product information.

This should be a wake-up call for retailers to infuse more transparency (and traceability) into their brand's operational DNA. Today, we'll dive deeper into the world of transparency for retailers—what it is, why it matters, how it's being regulated—and the power it can bring to your brand.

Why Transparency Is Top Of Mind for Companies and Their Customers

Quality products are essential—but that's not enough to influence purchasing decisions. Today's consumers want to know where their products come from, how they were made, and who is responsible for their journey. In essence, they're asking for transparency.

In fact, a **Neilson INQ study** found that 81% of shoppers cited transparency, both in-store and online, as important for them to make a purchase. **McKinsey's research** corroborates that story, saying 66% of consumers are willing to pay more for sustainable products.

But it's not enough for brands to slap a "sustainably made" label on their products and call it a day. Because consumers also demand proof. They want to see sourcing information, material composition, and how something gets from point A to point B.

Governments are responding with legislation to help them do just that. Several new initiatives require brands to provide deeper visibility into their supply chains. One solution on every retailer's lips is the Digital Product Passport (DPP)—a groundbreaking solution bridging the gap between consumer expectations and regulatory compliance. By leveraging item-level traceability, DPPs offer a digital record that travels with a product, providing detailed information on its lifecycle. Other initiatives include the EU's Ecodesign for Sustainable Products Regulation (ESPR), which mandates DPPs for certain product categories (textiles, furniture, paints, etc.) to support sustainability goals.

In 2025 (and beyond), sustainability, ethical sourcing, and authenticity aren't just brand buzzwords; they should be woven into the fabric of your operations, not only for the good of your customers but also to stay compliant with tightening global regulations. Retailers that adopt digital passports are ahead of the curve, meeting evolving consumer expectations while remaining compliant.

The Role of Digital Product Passports (DPPs) in Modern Retail

Digital Product Passports (DPPs) introduce unprecedented transparency and traceability throughout a product's lifecycle. These digital records reshape how consumers interact with products and how brands manage their supply chains. Let's take a closer look at what DPPs are and how they work.

What Is a Digital Product Passport?

A Digital Product Passport is a comprehensive, digitized record containing key product information, accessible via QR codes, RFID tags, or blockchain-based platforms. These passports serve as a digital representation of a physical item, containing data about its entire journey from origin to end.

DPPs typically include:

- Manufacturing and origin details
- Material composition and recyclability
- Ethical and sustainability certifications
- Compliance information
- Usage and repair instructions
- Supply chain and logistics data





Why Are Retailers Adopting DPPs?

Digital Product Passports (DPPs) emerged as part of the European Union's broader sustainability initiatives, specifically under the Ecodesign for Sustainable Products Regulation (ESPR) and the Circular Economy Action Plan (CEAP). The concept was introduced to promote supply chain transparency, traceability, and sustainability across various industries.

The implementation of DPPs is set to begin in phases, with the first Digital Product Passports becoming operational by August 2027, focusing on high-impact categories like batteries for electric vehicles, textiles, and furniture.

While DPPs are an EU initiative and will be mandatory for products sold within the EU market, they are not currently mandatory in the United States. However, it's important to note that even businesses outside the EU must comply with DPP requirements if they wish to sell their products within the EU market.

Digital Product Passports are becoming an essential tool for modern retailers, enabling them to meet consumer expectations, drive circular economy initiatives, and foster brand trust. Brands that embrace this technology early stand to gain a significant competitive advantage.

If you're ready to take the plunge, you'll need to embrace a foundational operational principle of DPPs—**item-level traceability**.

Item-Level Traceability: The Cornerstone of Effective DPPs

Digital Product Passports (DPPs) are only as good as the data that powers them. This is where item-level traceability becomes crucial, serving as the foundation for creating reliable and effective DPPs.

Item-level traceability provides the granular data necessary to create comprehensive and trustworthy DPPs. This level of detail allows brands to:

- Track individual products from raw materials to store shelves.
- Provide accurate and verifiable information to consumers.
- Comply with regulatory requirements like **FSMA 204** and the EU Digital Product Passport.

Without high-quality, standardized data, DPPs risk being incomplete or unreliable—undermining their entire purpose.

Technologies Enabling Item-Level Traceability

Several key technologies make item-level traceability possible.

The first is RFID (Radio-Frequency Identification). This allows for contactless scanning and real-time tracking of individual items, significantly improving inventory accuracy. This enhanced accuracy can lead to increased sales and improved operational efficiency, as it enables retailers to make data-driven decisions to optimize their processes.

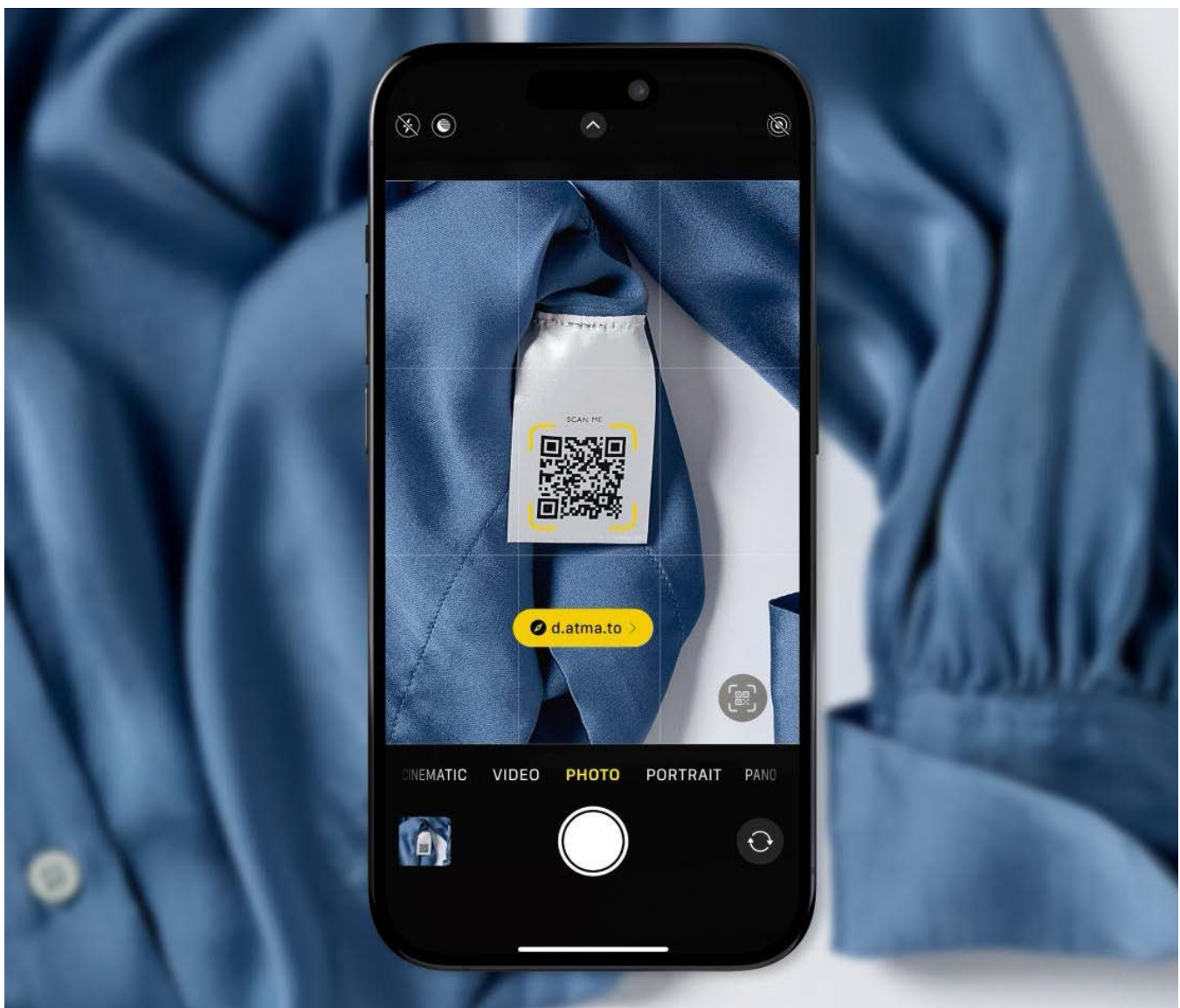
Integrating **IoT (Internet of Things) into the traceability mix** has also been a game changer. With it, we can use sensors that monitor conditions like temperature and location throughout the supply chain, allowing for immediate intervention if issues arise. This technology enables companies to monitor product quality, optimize delivery routes, and improve handling of shipment delays, ultimately enhancing the overall efficiency of the supply chain.

Blockchain is also on the cutting edge of traceability technology, providing a secure, tamper-proof ledger for recording product data and transactions. Blockchain's decentralized nature makes it highly resistant to tampering and fraud, offering enhanced security for supply chain data. It also enables better collaboration among supply chain partners by providing a unified source of information, reducing the potential for confusion, and improving communication.

And, of course, we have to talk about the role of **AI and Machine Learning in item-level traceability technology**. This tech enhances the data and analytics capabilities of an organization. For example, predictive analytics could forecast supply chain disruptions (by taking weather, routes, and geopolitical factors into account). Knowing this information upfront enables organizations to optimize their logistics.

When combined, these innovations create a harmonized and orchestrated data ecosystem that benefits all stakeholders—brands, consumers, and regulators alike.

As brands continue to embrace these technologies, Digital Product Passports will become a standard feature in modern retail, redefining how we buy, sell, and trust products.



Key Benefits of Precise, Item-Level Tracking

What's the point of having this granular data? Why not just keep track of inventory at the SKU level?

— Streamlined Product Authenticity and Verification

When a brand can pinpoint the exact location and condition of every product, products can be verified with certainty, protecting both the brand's reputation and the consumer's trust.

— Minimized Impacts of Recalls

In the unfortunate event of a recall, this precision becomes a lifesaver – both literally and figuratively. Instead of broad, costly recalls, brands can target only the affected items, minimizing waste and maintaining trust.

— Enhanced Sustainability Efforts

Item-level traceability empowers brands to turn their sustainability commitments into measurable actions. Every step can be analyzed for its environmental impact, from raw material sourcing to end-of-life recycling.

— Optimized Supply Chain

Granular visibility allows companies to optimize routes, reduce transit times, and minimize waste, ultimately leading to significant cost savings and improved operational efficiency.

— Improved Inventory Management:

Item-level traceability provides real-time insights into stock levels, enabling brands to maintain optimal inventory, reduce overstock situations, and prevent stockouts. Moreover, tracking each item's movement helps quickly identify and address sources of shrinkage, whether from theft, damage, or administrative errors, significantly reducing losses.

— Elevated Customer Experiences:

The cost of getting your customer experience wrong is high. **PwC found** that 32% of customers would stop doing business with a brand they loved after just one bad experience. By providing customers with detailed information about a product's journey, origin, and characteristics, brands can create a deeper connection between consumers and their purchases. This transparency opens up new avenues for engagement, such as interactive packaging or personalized recommendations based on a customer's purchase history and preferences.

As we move further into an era where transparency is not just appreciated but expected, item-level traceability stands as a beacon of progress. It's the key that unlocks the full potential of Digital Product Passports, transforming them from a compliance checkbox into a powerful tool for building trust, enhancing operations, and paving the way for a more sustainable future in retail.

The Path To Transparency and Traceability

The truth is, in retail, transparency and traceability are becoming non-negotiable elements of successful brand strategies.

As we've explored, Digital Product Passports (DPPs) and item-level traceability are revolutionizing how products move through the supply chain and how consumers interact with their purchases. Today's shoppers demand more than quality products—they want the full story. The upcoming EU regulations, with DPPs becoming operational by August 2027, further underscore the urgency for brands to **embrace these technologies now.**

Coming in Part 2: Transparency in Action

In our next installment, we'll dive into real-world examples of brands leading the way in transparency and traceability.

You'll discover how innovative retailers are implementing these technologies to build consumer trust, comply with regulations, and gain competitive advantages in the marketplace. We'll also explore what the future holds for transparency in retail as technology continues to evolve and consumer expectations reach new heights.

Don't miss these actionable insights that could transform your brand's approach to transparency and set you up for success in the increasingly conscious consumer landscape of tomorrow.



About BarTender

BarTender is a brand of Seagull Software, a global leader in real-time, item-level visibility and label management solutions, dedicated to powering the world's most complex supply chains with innovative tools for traceability, authentication, and automated inventory management.

BarTender software enables businesses across all industries to design, manage, print, and automate the production of labels, barcodes, and RFID tags, ensuring seamless tracking and compliance for over 100 billion unique identifiers each year. Leveraging the Track & Trace high-security, scalable SaaS traceability platform, Seagull delivers end-to-end intelligence, harmonizing data to drive operational efficiency, enhance customer experiences, and reduce risk.

Headquartered in Redmond, Washington, with offices across the United States, Europe, Latin America, and Asia, Seagull empowers businesses worldwide to keep their products moving, traceable, and safe.

Learn more at bartendersoftware.com.

