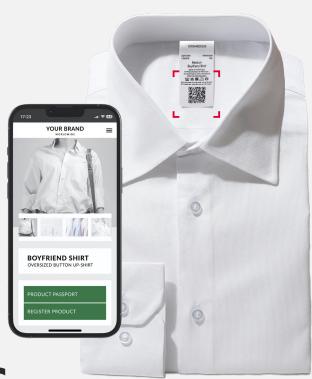
/CHARMING



SMART LABELS, SMARTER BUSINESS

The Essential Guide to Digital Labeling Transform your labels for the digital future

In this easy-to-read guide, we'll cover the basics of digital labeling: what it is, why it's changing, what it can do for you, and how to get started. We'll look at data-driven solutions like RFID and DPP, as well as consumer-facing technologies like QR and NFC.

At the end of this guide, you'll know the basics of digital labeling technology and how to get started elevating your brand's labels.

WHAT IS DIGITAL LABELING?

Digital labelling involves combining physical product labels with advanced digital technologies to offer enhanced functionality, detailed information, and interactive features. It bridges the gap between physical and digital data, enhancing efficiency, transparency, product authenticity, and customer satisfaction across the entire business cycle.

A digital label takes advantage of the following technologies, RFID, NFC, DPP and QR codes, to produce the best experience for the brands, vendors, manufacturers, and buyers.



RFID Radio Frequency Identification

RFID is a technology that provides an easy, accurate, and effective method to manage inventory, locate products, and understand your supply chain. It helps eliminate human error, increasing inventory accuracy to near perfect at a fraction of the time compared to traditional methods.

By providing real-time data, RFID allows you to act with greater efficiency across the entire production and customer purchasing cycles and brings all inventory to one location, enabling the omni-channel shopping experience your customers are looking for.



Eliminate human error, increasing inventory accuracy to near perfect



NFC Near Field Communication

Near Field Communication (NFC) is a short-range, wireless RFID technology that can serve a wide variety of purposes — from consumer marketing to mobile payments. NFC tags, encoded with information and attached to physical objects, can be read with a smartphone to provide engaging, interactive experiences for users.

Take advantage of the following technologies to produce the best experience

DPP Digital Product Passports

A Digital Product Passport (DPP) is a digital record that provides comprehensive information about a product and its entire value chain. This includes everything from the origin of the product, materials used, environmental impact, and disposal recommendations. As a result, the information in the DPP will provide consumers transparent insights into the goods they purchase. /CHARMING.DIGI





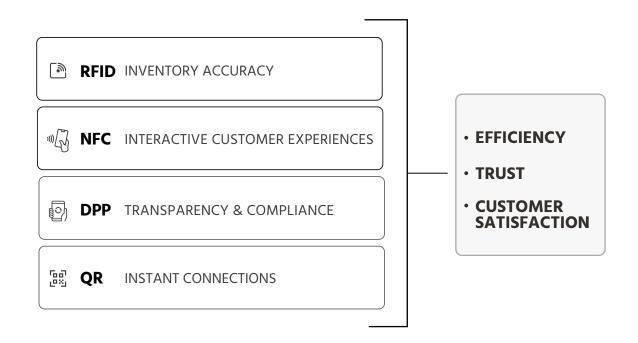
QR Codes Quick Response Codes

A QR code (Quick Response code) is two-dimensional barcode that can store information in a grid of black and white squares. It is widely used to access digital data quickly and efficiently via a smartphone or QR code scanner.

THE BENEFITS OF DIGITAL LABELING

What can digital labeling really do for your business?

Between RFID, DPP, NFC, and QR, you can create a powerful ecosystem that drives efficiency, trust, and customer satisfaction across your business.



RFID

Smarter Inventory, Less Hassle





Save Time

Instantly track and manage inventory without manual scanning each item



Real-Time Insights

Know exactly where your products are at any moment



Fewer Errors

Reduce mistakes caused by human oversight



Scale Effortlessly

Easily manage large warehouses or retail networks

What this means for you

Fewer stockouts, less time spent on inventory checks, and a smoother supply chain.

NFC

Create Interactive Customer Experiences





Instant Connection

Share product details to your customers with a simple smartphone tap



Product Verification

Instantly prove your product's authenticity



Brand Loyalty

Build lasting connections through interactive engagement



Personalization

Deliver tailored offers, experiences, and stories



Data Carrier for DPP

Link products directly to DPP data

What this means for you

Happier customers, increased brand loyalty, and a premium product experience.

QR CODE

Easy Access, Maximum Reach





Simple & Fast

Customers scan and get information instantly



Data Carrier for DPP

Qr-code can act as data carrier to link products with their DPP data.



Product Details Made Easy

Share manuals, promotions, or videos in seconds



(\$) Cost-Effective

Quick to implement and works with any smartphone

What this means for you

Higher engagement, better communication, and smarter product storytelling.

DPP

Build Trust Through Transparency





Demonstrate Sustainability

Easily share details on materials, recyclability, and product origins



Support Circularity

Enable recycling and reuse with clear data



Meet Regulations

Stay ahead of compliance requirements



Product Verification

Instantly prove your product's authenticity



Boost Brand Trust

Show customers you're transparent and environmentally responsible



Personalization

Deliver tailored offers, experiences, and stories, turning your products into mobile marketing campaigns

What this means for you

Stronger customer relationships, compliance with ease, and alignment with sustainability goals.

WHY NOW?

The emergence of digital labels has created a new norm for consumer purchasing. Nowadays, buyers are expecting elevated digital experiences in their product. What else makes now the right time to upgrade your labels?

SPEED & EFFICIENCY

Faster processes mean lower costs, improved accuracy, and quicker decision-making. In fact, RFID raises **inventory accuracy to 99.99%**, compared to 70% with traditional barcode scans — saving you time and labor costs.

With RFID, you can do more with less — more counts, quicker, with fewer team members. What used to take a team of people and hours of time can now be done daily with one person in only a few minutes. RFID can actually increase inventory count rates by **nearly** 6000%.

Technologies like RFID and inventory and data management software like Truecount streamline inventory management, reduce errors, and provide real-time insights into the location and movement of your products.

Upgrading your labels is a strategic move to ensure your business stays efficient in a rapidly shifting market.

RFID can actually increase inventory count rates by nearly 6000%

SUSTAINABILITY

It's no surprise that sustainability is only growing in its global importance. The fashion industry **contributes about 10%** to overall global greenhouse gas emissions — proving that it's time for things to change.

Brands, now more than ever, are taking more responsibility for their contributions to the environment. But in order to improve processes without breaking the bank, companies need to upgrade their technology.

/CHARMING

In fact, Harvard Business Review discovered that, as younger generations begin to dominate the market, sustainability has become a vital part of product purchasing. Between environmental needs and consumer buying habits, sustainability is a key reason brands are looking to leverage digital labels.

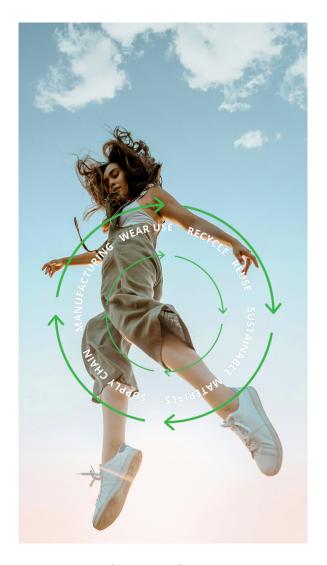
COMPLIANCE

Governments and regulatory bodies are beginning to understand that, while buying power is prioritizing sustainability, businesses need additional pressure to shift to more sustainable practices. In fact, an alliance of 130 brands called for an increase in digital labeling requirements.

EU just passed a ruling that will require brands to use DPPs by 2027.

Now, laws are emerging around the world that require improved data collection on internal processes and better communication with consumers. In fact, the **EU just passed a ruling** that will require brands to use DPPs by 2027.

But the EU isn't the only governing body taking action.



The Responsible Textile Recovery Act, requiring brands selling to California consumers to take accountability for the entire lifecycle of their products, including collection, transportation, and recycling.

Digital labels — and the data they collect and share — will keep you prepared to manage growing sustainability regulations.

GET STARTED WITH YOUR DIGITAL LABELING SOLUTION TODAY



Ready to transform your labeling?

Our experts are here to help you.

With **TrueCount RFID software**, **Charming.DIGI Digital Product Passports**, and versatile **QR and NFC codes**, we provide everything you need to drive efficiency, transparency, and customer satisfaction.

Start your digital labeling transformation today.

Contact our team at Charming for tailored solutions that meet your business needs.



