

THE POWER OF DIGITAL PRODUCT IDENTITY IN FOOD

A Practical Guide
to Unlocking
Value Across the
Food Lifecycle



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Executive Summary

Food consumer packaged goods (CPG) manufacturers and brand owners operate in an increasingly complex environment. Regulatory requirements are expanding, sustainability and circular economy obligations are becoming enforceable, consumer expectations for transparency are rising, and supply chains are growing more global and fragmented.

Across all these pressures, one reality is emerging: **food products must now carry trusted digital information throughout their lifecycle**. Regulators, retailers, partners, and consumers increasingly expect products to be uniquely identifiable, verifiable, and connected to accurate, up-to-date data.

This evolution is driving the adoption of **Digital Product Identity (DPI)**. Digital Product Identity is the digital representation of a physical product, embedded in a 2D code - typically a QR code or DataMatrix - and connected to trusted data sources. It establishes a consistent digital foundation that supports regulatory compliance, traceability, consumer transparency, sustainability reporting, and operational efficiency across markets.

At the core of the DPI is a unified model that combines **GS1 Digital Link-based QR codes** (enabling standardized product identification, traceability, and consumer access) with a

suite of traceability and authentication technologies. Together, these capabilities create a secure and interoperable product identity that supports transparent information flows, dynamic consumer experiences, and robust protection against counterfeiting and diversion, setting new benchmarks for compliance, efficiency, transparency, and product integrity.

This guide explains:

- Why Digital Product Identity is becoming essential for the food industry
- The key market and regulatory drivers accelerating adoption
- Best practices for implementing a future-ready DPI strategy
- How five core personas (Marketing, Sales & Compliance, Quality, Supply Chain, and Manufacturing) derive concrete value from DPI
- Practical guidance to move from experimentation to scalable deployment



PART 1

Industry Challenges & Market Drivers

The food industry is undergoing a structural transformation. What were once isolated pressures - regulation, sustainability, consumer transparency, operational complexity -are now converging. Together, they are redefining how food products are identified, governed, and trusted across their lifecycle.

At the center of this shift is the product itself. Increasingly, food products are expected to serve as a **reliable interface between the physical and digital worlds**, enabling access to accurate, verifiable information for multiple stakeholders.

Six key drivers are accelerating this transformation.



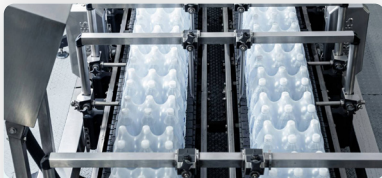
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