Today’s consumers are scanning product barcodes with smartphones to learn more about what they are buying—or considering buying.

Today there is no seamless, non-proprietary way for brands, retailers and healthcare suppliers to communicate with consumers via a barcode scan. Moreover, having multiple barcodes on a product (some of which do not contain standardised identifiers like GS1 Global Trade Item Numbers) causes scanning issues at the point-of-sale (POS) and/or point-of-dispense (POD). For consumers, patients and care providers, these experiences lead to lost time, frustration and possible risk. For brands and retailers, they translate to missed opportunities, lost sales and the potential erosion of brand loyalty.

**GS1 Digital Link offers a solution**

GS1 Digital Link “web-enables” barcodes by providing a simple, standards-based structure for the data that is encoded in them, connecting consumers and patients to online information about a product. Information such as expiration dates, nutritional and medical product data, warranty registration, troubleshooting instructions—even social media links. The GS1 Digital Link standard makes all of this possible no matter what data carrier is used—even those that don’t include a URL. Connections to other sources of information are enabled through a lookup tool. Imagine a physical phone book or a list of contacts on your phone. When you look up a company (or person’s) name, it is connected—or “resolved”—to a phone number and to other relevant information, such as a physical address, email address, job title, etc.

In a business-to-consumer context, industry will be able to use GS1 Digital Link to engage consumers and patients via apps and websites by simply scanning a barcode. Doing this will allow industry to engage more dynamically with consumers and patients and to share relevant information with them from across their entire enterprise. In a business-to-business context, GS1 Digital Link lays the foundation for connecting to wherever human—and machine-readable—information may be. It is envisioned that the same barcode used by consumers will be scannable at the checkout counter, thus setting the foundation for the future of codes on packaging.

GS1 Digital Link promises to enhance the shopping experience for consumers while helping to strengthen brand loyalty, increase revenue and improve supply chain traceability and efficiencies for brand owners and retailers.
Here’s how GS1 Digital Link works

Consumer experience
A consumer wants more detailed nutritional information and additional recipes for a cake mix. They can use their smartphone (no specific app required) to scan a QR code on the package that contains a GS1 Digital Link Uniform Resource Identifier (URI). The phone points them to a brand-owned web page that provides nutrition and recipe information—as well as other product information and/or brand experiences. If the same consumer uses a retailer app to scan the exact same barcode, they can be connected to different experiences such as ordering products, collecting loyalty points and “sharing” products with friends on social media.

Healthcare experience
By using an app that can read the pharmaceutical product’s GTIN encoded in the GS1 DataMatrix barcode on the package, the consumer is redirected to an electronic patient information leaflet, which, through a simple setting in their smartphone, is delivered in their preferred language. The app “knows” the rules of the GS1 Digital Link standard, so it uses the data in the barcode to connect to an industry-agreed “resolver” service to find the source of the leaflet.

Supply chain
GS1 Digital Link enables a future product-listing process that uses foundational GS1 identity to streamline and connect trading partners to relevant, brand-authorised sources of data. In addition to the types of data mentioned above, links to essential trading partner information about product safety, safe-handling directions, transportation, disposal, packaging hierarchies and planograms can also be shared.

Traceability
Traceability solutions may also be greatly enhanced by the use of GS1 Digital Link as it enables the identification of specific product batches (or even serialised products). This additional data in the barcode can support linking to information about provenance, recall and/or expiry. Retailers can save a significant amount of time—and avoid losing revenue and brand trust—by quickly locating and removing products from shelves more precisely.

Take steps today

1. Lay the foundation
Assign GS1 identifiers to each of your products (GS1 Global Trade Item Number) and/or your location (GS1 Global Location Number). Encode your products’ unique identifiers into data carriers like an EAN/UPC or GS1 DataMatrix barcode and apply to product packages. If your organisation is using QR codes on your products, ensure that they are encoded with a GS1 Digital Link-formatted URI.

2. Utilise apps
GS1 Digital Link turns your products’ identifiers and barcodes into powerful communication channels that your customers can scan and be directed to in order to receive a wealth of digital information. As a retailer, begin to leverage your apps (both those used inside your enterprise and those used by your consumers) to read and use GS1 Digital Link-structured barcodes.

3. Connect your products to your data
Using the GS1 Digital Link standard structure means that you no longer need to ensure that all of your data, assets and content are available in one place. Work with GS1 to enable your own resolver capabilities to connect product identifiers to wherever you choose to store your data.

Use one barcode—online and offline
The introduction of GS1 Digital Link does not mean that the use of the EAN/UPC barcode is changing. Quite the contrary: brand owners and retailers will still use the ubiquitous barcode for years to come—only now they have the future opportunity of migrating to a single, web-enabled barcode.

Get connected
To explore the potential of GS1 Digital Link for your business, or to participate in a proof of concept or pilot study, contact your local GS1 Member Organisation. Visit www.gs1.org/contact.