



The Global Language of Business

**2D barcodes case study**

# Brazilian gourmet shop scans the world's first 2D barcode with a GS1 Digital Link

Parla Deli is unlocking business value and connecting to customers by implementing the very latest GS1 standards.



## Challenge

This gourmet bakery needed to reduce food waste, improve inventory management and be more confident that they weren't letting expired products get into their customers' shopping bags.

## Solution

Parla Deli replaced manual processes with an automated system that integrates their Enterprise Resource Planning (ERP) and point-of-sale (POS) software. Products are now labelled with a two-dimensional QR Code that contains a GS1 Digital Link.

## Benefits

Fifty percent less food waste. Better safety. Improved efficiency, traceability and visibility over their processes. And a stronger, closer engagement with shoppers.

On 28 October 2021, at 9:22 AM, Marcelo Silva watched proudly as one of his employees scanned a tray of mozzarella cheese at the checkout of Parla Deli, the high-end bakery, grocery store and restaurant that he founded and manages in Recife, Brazil.

## A beep for the history books

This was no ordinary cash register beep: it was the sound of the world's first-ever scan of a two-dimensional QR Code with a GS1 Digital Link.

Traditional barcodes—those familiar black-and-white vertical lines—are beginning to give way to a new generation of barcodes that can hold much more information, such as QR Codes or GS1 DataMatrix barcodes.

One scan of these two-dimensional, or 2D, barcodes can connect people up and down the supply chain to the information they need for inventory management, traceability programmes, sustainability initiatives, consumer engagement actions and more.

Brand owners can tap even more fully into the power and flexibility of these 2D barcodes by encoding them with a GS1 Digital Link. In the same way that a URL points to a website, a GS1 Digital Link enables connections to all types of business-to-business and business-to-consumer information.

## The problem with manual processes

Marcelo Silva's shop offers food items from outside suppliers as well as food items he and his team make themselves.

"Until recently, we had very few formal or automated processes," says Marcelo. "We received products and managed stock levels ourselves."

Manual inventory management like that is incredibly labour intensive, inefficient and prone to human error. Parla Deli would sometimes run out of certain items due to expiration dates arriving before the items could be sold. Similarly, the shop occasionally had shortages when some items sold better than expected due to a mismatch between production and actual sales averages.

"We had very poor visibility of our stocks," notes Marcelo, "and that created a cascade of other problems."

## GS1 standards to the rescue

Marcelo Silva is a second-generation believer in the power of GS1 standards. His father was a senior executive in a major chain of supermarkets and a member of the team that implemented point-of-sale scanning systems.

"My father was there when they scanned the very first barcode in Brazil," says Marcelo. "He has always been my inspiration."

It's no coincidence that Marcelo turned to GS1 to help solve his efficiency problems. Convinced of the importance of being leaders and not followers, Marcelo chose to implement a global solution built upon the 2D QR Code encoded with a GS1 Digital Link. Unlike legacy barcodes that primarily serve the needs of retailers, these new solutions offer benefits for everyone, from manufacturers to retailers to logistics providers—and of course, consumers.



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## Rethinking their systems

To seize all the benefits, Marcelo needed to update and upgrade certain aspects of his product provisioning and order-to-cash processes. Parla Deli implemented a new ERP management system with enhanced software to simplify the process. Point-of-sale scanning systems were replaced with new handheld scanners capable of reading 2D barcodes, and the software that powered the store's scales and scanners was also upgraded.

The QR Code for products processed by Parla Deli contains a GS1 Global Trade Item Number® (GTIN®), of course, but also a lot number, serial number, production date, net weight and price. Parla Deli's systems also connect to the Verified by GS1 service to verify product information of the items from external suppliers in a global, trusted source. The Verified by GS1 service allows Parla Deli to validate the company owning the GTIN and match the product with data in their system.

## Benefits for the store and its shoppers

The benefits for Parla Deli as a business were clear. Marcelo and his teams had meaningfully better inventory management. Parla Deli teams can now check on product stocks not only by units but also by weight.

"We also have much more proactive inventory management," notes Marcelo. "Ordering used to take hours, and we can now get it done in just seconds, with no mistakes."

With QR Codes encoded with a GS1 Digital Link on all items, Parla Deli can now also ensure excellent traceability and highly efficient expiration date management. The first results after implementation show a reduction of food waste by 50%.

This allows the shop to offer customers a big improvement in safety and confidence because the system automatically blocks the sale of expired products at the checkout.

"I obviously must also mention the increase in speed and efficiency at the checkout," says Marcelo. "With QR Codes and our scanning system upgrade, it just doesn't matter if the package is crumpled, dirty, torn, cylindrical, chilled or frozen. We don't need to scan a product more than once. We are seeing zero failure."

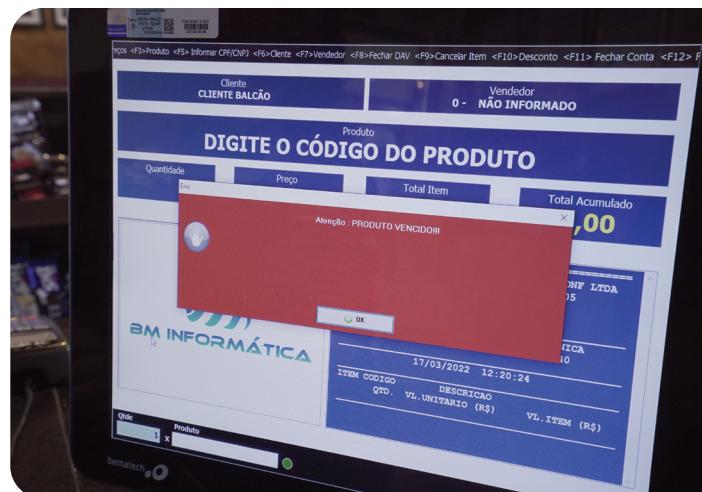
## Connections, connections, connections

In Marcelo's opinion, however, the biggest benefit they have seen is the engaging new shopping experience they have brought their customers.

"When we embedded GS1 Digital Link in our QR Code, something magical happened. We connected the physical and the digital. We connected companies and customers. We connected people to products. We connected everything to everyone at any time. In this new era of communication, we can now give real-time information to the customer."

That's an inherent feature of the GS1 Digital Link standard. Simply by pointing a smartphone at the QR Code on any Parla Deli product, customers can see the best way of preparing or cooking it, along with its ingredients, nutrition information and more.

"They can even easily buy that product again if they liked it," adds Marcelo, "because we included a link driving them to our e-commerce website."



“

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—Marcelo Silva, Founder and Owner, Parla Deli

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## Collaboration with business partners is fundamental

A migration to 2D barcodes affects systems across a company's order-to-cash process, including ERP software, point-of-sales systems and equipment, and even the scales in the produce section. That's why Marcelo feels it's crucial to work collaboratively with business partners.

“Companies and solution providers willing to bet on the opportunities of 2D implementation made this project possible for us,” he says, “It was the collaborative effort that let us imagine, develop and implement everything in less than two months.”

## Looking ahead

Though he is extremely pleased with the benefits Parla Deli has already seen, Marcelo Silva does not intend to stop there.

“We plan to use the QR Codes with GS1 Digital Link to measure our customers' satisfaction. They can tell us if they liked our products or not, if they enjoyed their meals, if they found our food items to be fresh, if they would recommend us to a friend or a colleague. We will use this system like an NPS, a Net Promoter Score, so we can continue to improve our offering and satisfy our customers.”

## QR Code with GS1 Digital Link

### Barcode choice:

- QR Code with GS1 Digital Link syntax

### Data encoded:

- GTIN
- Batch/Lot number
- Serial number
- Production date
- Expiration date
- Net weight
- Price to pay



Scan the QR Code with GS1 Digital Link here to have the same experience as Parla Deli customers!

## About Parla Deli

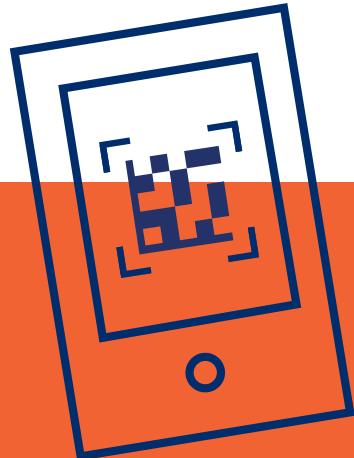
Based in Recife in the Brazilian state of Pernambuco, Parla Deli is a bakery, a full-service restaurant and a neighborhood grocery store specialising in gourmet and high-end products. With a focus on innovation and a commitment to providing unique items, the three Parla Deli shops sell over 2,000 products, many of which are made in-house by the Parla Deli teams.

[www.parlapizza.com.br](http://www.parlapizza.com.br)

## About GS1

GS1 is a neutral, not-for-profit organisation that develops and maintains the most widely used global standards for efficient business communication. We are best known for the barcode, named by the BBC as one of “the 50 things that made the world economy.” GS1 standards improve the efficiency, safety and visibility of supply chains across physical and digital channels in 25 sectors. Our scale and reach—local Member Organisations in 116 countries, 2 million user companies and 6 billion transactions every day—help ensure that GS1 standards create a common language that supports systems and processes across the globe.

[www.gs1.org](http://www.gs1.org)



## Get started with 2D barcodes by GS1

GS1 is working with industries to support 2D implementations and create guidance for assisting in the design of proof-of-concept demonstration pilots.

At a high level, consider the following elements:

**Retailers:** create a vision for use cases enabled by 2D barcodes, assess your current technical capabilities (scanners and back-office systems) to understand your roadmap to enable scanning of all barcodes, and collaborate with other stakeholders to ensure alignment on goals and outcomes.

**Brands, Manufacturers and Suppliers:** bring together your supply chain and marketing executives to collaborate on a combined barcode strategy that achieves both consumer engagement and supply chain goals.

**Solution Providers:** consider the upgrades needed to your systems to enable multiple barcode scanning/printing and support your end-users achieve their top use cases enabled by 2D barcodes.

## Questions about the 2D future?

Contact your local GS1 Member Organisation to see how GS1 can help you begin your journey toward a new dimension in barcodes!

[www.gs1.org/contact](http://www.gs1.org/contact)

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