

# 2D BARCODES



**2022 SAVE FOOD PACKAGING  
DESIGN OF THE YEAR  
SILVER WINNER**



## Woolworths & GS1 Australia 2D Barcodes by GS1

### Key Outcomes and Measurement



Improves traceability & stock management

**40%**

Improvement in out-of-code dumps & stock adjustments



2D Barcodes provide access to endless amounts of information



More targeted & accurate product recalls



Expired and recalled products can be stopped at POS



Reduce food waste by up to **40%**



Improve in-store stock rotation



21% improvement in productivity

### Save Food Packaging Guidelines



Contain & protect



Extend shelf life/preserve



Household convenience



Consumer education



Balance environmental impacts

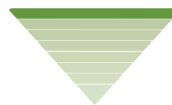
### Sustainable Packaging Guidelines



Design for Product Waste



Optimise Material Efficiency



Design for Recovery



Design for Transport Efficiency



**Product:** 2D Barcodes by GS1

**Company:** Woolworths & GS1 Australia

**Country:** Australia

GS1 Australia is the leading provider of standards and solutions for over 25 industry sectors. They introduced barcoding to Australia in 1979 and today enable more than 22,000 member companies, of all sizes, to become more efficient, sustainable and profitable. As a member-based, not-for-profit organisation, the GS1 Australia charter is to supply and manage barcode numbers, operate and manage supply chain standards in accordance with the global GS1 system and to provide related solutions and services to their members.

COORDINATED BY



ANZ REGIONAL AWARDS PROGRAM



INTERNATIONALLY ENDORSED BY



EXCLUSIVE ENTRY TO



## 2D BARCODES

### When considering your services and products within the supply chain, through to the end consumer, what is your organisation's understanding of food loss & waste?

For the purposes of this application, food loss and food waste are essentially the same thing. This is food that has been grown or produced and is ultimately not eaten by the end consumer.

This can occur in the production process or somewhere in the supply chain, from warehouse to distribution, to retail outlet and consumer, as well as the various transport options along the way.

### What prompted your organisation to consider packaging design or redesign that aims to minimise food loss & waste?

Once a food product is placed on a supermarket shelf, retailers lose visibility of product information such as use-by/best before dates. This means store members are required to physically walk the store and check products on the shelves and identify the use-by/best before dates i.e. pre-packed salads, yoghurt, milk etc and manually mark down those that are close to expiration.

**With 2DBarcodes, expiration dates are encoded into the barcode.** When the product is loaded onto the shelf, store teams know that once that product is sold, inventory systems will remove that product from stock.

This enables retailers to quickly and accurately identify which products are on the shelf and their use-by dates and direct team members to mark down those products that are close to their use-by date for quick sale.

Without the visibility provided by 2DBarcodes, products can go out of date on the shelf and end up in the waste bin.

Providing better stock visibility also assists with re-routing goods to manage volatile supply and demand challenges, as have been experienced in recent times.

### What was the packaging like before the new design?

Prior to 2DBarcodes, 1D linear barcodes have been used to drive growth and efficiencies for all industries and markets across the globe for more than 50 years. However, they are limited to only encoding unique product identification.

2DBarcodes can encode much more information than just the product identification number. It can also connect to the internet and multiple urls. Instantly making available to the consumer information such as handling instructions, storage, preparation, reuse of the product and recycling of the packaging.

Listed here are some of the examples of information that can be included in a 2DBarcode.

- A video on the sustainability of the packaging design.
- A weblink to recycling instructions.
- A pdf outlining instructions for opening, resealing, closing and dispensing of the packaging and the product.
- An image displaying storage options, left over storage ideas and recipes.
- A link to a website about the brand and the use of circular economy approaches and the waste hierarchy to address food waste demands.

This provides producers, brand owners and retailers with new opportunities to digitally connect with their consumers and share information to help reduce food waste.

### What factors prompted you to enter the PIDA awards?

The team are proud of the work conducted between GS1 Australia and Woolworths and the opportunities this can provide for the future of Australia. Winning a PIDA Award allows us the opportunity to share this program with a wider network.

SCAN ME



## 2D BARCODES

### When thinking about developing your award-winning packaging, what was the design considerations for minimising food loss & waste and why?

Food waste is a concern at a number of levels:

- For the global community, climate change and a growing population mean we need to maximise scarce resources.
- For retailers, food waste costs money in lost sales, disposal costs and potential fines for product sold out of date.

### How do you measure the impact your product packaging design has on food loss waste levels?

2DBarcodes by GS1 Australia & Woolworths are reducing food waste by up to 40%.

2DBarcodes are currently applied to 50% of the Woolworths meat range in over 1000 Woolworths stores and expanding. To put this into perspective, around 20 million customers shop at Woolworths every week.

Woolworths has recorded the following measures as a result of implementing 2DBarcodes.

- Up to 44% improvement in Out of Code Dumps and Stock Adjustments.
- Up to 21% improvement in productivity.
- All the while contributing to sustainable packaging initiatives and product optimisation.

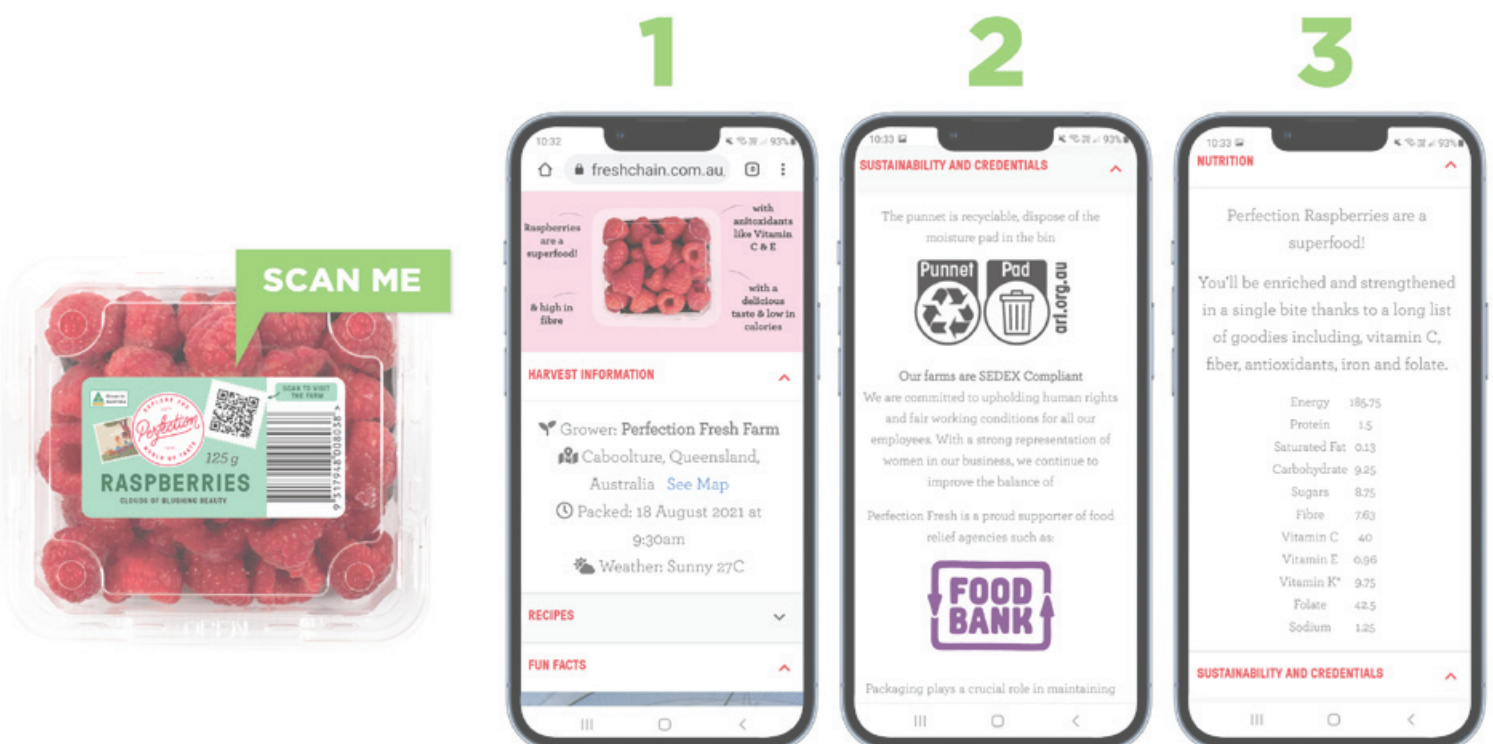
### What do you see as the key features and outcomes from this award-winning design? How can it make an impact on food loss and waste?

The key features and outcomes of 2DBarcodes and food waste are demonstrated best by two of GS1 Australia's business partners.

*"We are proud to be the first Australian supermarket to invest in this technology and hope it can help us further reduce food waste. 2DBarcodes have immense potential and we're excited to see how they will improve traceability and stock management,"* says Richard Plunkett, General Manager for Business Enablement, Woolworths.

*"The biggest benefits of 2DBarcodes are around giving retailers more control. One small barcode can reveal a lot of information that can't be squeezed onto a traditional linear barcode, and that helps retailers solve the problems of managing stock rotation and management in the areas of meat, seafood, deli, dairy, bakery, as well as packaged fruit and vegetables.*

*"This is not just about a new point of sale (POS) barcode for short shelf-life products. This has significant potential to deliver many local supply chain efficiencies as well as support the Federal Government initiatives in the National Food Waste Strategy, which is working towards halving Australia's food waste by 2030,"* added Mark Dingley, CEO of Matthews Australasia.





### As a winner of the PIDA awards, how valuable is the award to your organisation?

*“The PIDA award is a validation the work by GS1 Australia and provides recognition of the decision made by Woolworths to lead the world in the adoption of this technology. It celebrates the hard work of bringing suppliers on board and taking them on a journey of changing their packaging and coding practices to deliver benefits for all partners in the supply chain,”* says Andrew Steele, Director - Retail, GS1 Australia.



The Australasian Packaging Innovation & Design (PIDA) Awards are an Australia and New Zealand program that is coordinated by the Australian Institute of Packaging (AIP). The awards recognise companies and individuals who are making a significant difference in their field across Australia and New Zealand. The PIDA Awards are the exclusive entry point for Australia and New Zealand for the prestigious WorldStar Packaging Awards.

The Design Innovation of the Year company awards recognise organisations that have designed innovative packaging within each of these six manufacturing categories:

- Food
- Beverage
- Health, Beauty & Wellness
- Domestic & Household
- Labelling & Decoration
- Outside of the Box

There are four special awards available:

- Sustainable Packaging Design
- Accessible & Inclusive Packaging Design
- **Save Food Packaging Design**
- Marketing Award

The **Save Food Packaging Design Special Award** is designed to recognise companies that are working to minimise or prevent food waste from paddock to plate using innovative and intuitive design features that can contain & protect, preserve and extend shelf life; all the while meeting global sustainable packaging targets. This is a WorldStar Packaging Award category.



The Australian Institute of Packaging (AIP) is the peak professional body for packaging education and training in Australasia. The AIP helps shape the careers of generations of packaging professionals – from packaging technologists to international packaging business leaders along with a host of people in associated disciplines – sales and marketing, purchasing, production and environment.

**Australian Institute of Packaging**

Australasian Office: [info@aipack.com.au](mailto:info@aipack.com.au) For PIDA enquiries: [pida@aipack.com.au](mailto:pida@aipack.com.au)