The evolving opportunity with expiry date visibility

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A fresh look at the challenges and opportunities
The drive for change

1. Complex challenge with huge impacts: Economically, Environmentally & Ethically

2. Increasingly **hot topic** for public and businesses

![Google search trends for “food waste”](image)

The Courtauld Commitment 2025

Tesco pledges to end edible food waste by March 2018
Understanding the underlying issues

1. Awareness

“We need horizontal visibility [of waste] for transparency and competition. And we need vertical visibility to stop pushing problems elsewhere and find opportunities together.”

Retailer

2. Acceptance

“There is acceptance of waste. The way waste budgets are done is to look at last year’s and build that in. It’s like an assumed fixed cost.”

Manufacturer

3. Ability

“The fundamental issue is trying to better match supply and demand. […] People tend to view waste from a cost control perspective – but it’s as much about customer availability – through failure to know what stock you have.”

Retailer
Where the community sees the opportunities

Continued interest in expiry date visibility

- “Real benefit would come in availability”
- “Smoothing orders would be helpful with production cycle”
- “Improving forecasts is the driver”.

“Databar is interesting but where is the compelling so what?”

Need for tipping point – emergence of “killer” app

The focus should be on customers to educate them – that would make the biggest difference

Desire for new solutions to avoid perceived barriers

- “We’ve looked at QR codes and want more info even if we won’t be early adopters”
- “Changing logistics systems is complex. Can you run a pilot without Databar to show there is a big benefit?”

“We want to improve how we track products with more data in the barcode”

Recognition of bigger (traceability) picture

- “Better traceability would reduce waste and highlight risks”

“We want to improve how we track products with more data in the barcode”
A new opportunity? | Helping households

“By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses.”

UN SDG Target 12.3

Food waste by sector in the UK (post-farmgate)

- Household: 71%
- Manufacturing: 17%
- Retail & wholesale: 3%
- Other*: 10%

Source: WRAP 2017

Leveraging emerging technology

Smartphone app concept aims to reduce food waste by 34%

Source: Smarter Applications

Source: New Food Magazine

* Other includes transportation, storage, and other factors contributing to food waste.
A future-proofed investment? | 2D barcodes

DataBar

- Compact
- Rapid printing
- Scalable attributes
- Point of sale use

2D

Future proofs traceability requirements and expands applications

Other sectors are leading the way – e.g. medicinal products with 2D barcodes

Renewed GS1 Global Office focus – and available in the UK today


Images not necessarily to scale
A long-term vision? | Transparency & traceability

The vision: “A full end-to-end traceability platform that tracks all products (dynamically) through the chain from raw material into household, including, location, storage, consumption, expiry and usage.”

**Enablers**

- Data carriers for expiry dates unlock capabilities, boosting case for change
- Growing demand and applications for info from empowered consumers
- Precedents of fTRACE & France’s collaborative traceability platform
- Product DNA platform with existing industry engagement to evolve
Our recommendations

1. Build business case, capabilities & connections
   - New, lower barrier concepts for trialling proposed
   - Purpose to: build capabilities and applications
   - Plus: measure benefits, develop partnerships, iron out issues

2. Implement 2D barcodes as standard for grocery
   - Expiry date carrier needed – but all have barriers to overcome
   - Need to future proof and economise any changes
   - Developments in other sectors pointing the way

3. Develop integrated, end-to-end traceability platform
   - Carriers to tackle food waste also enable greater traceability
   - Compelling case for change and bigger waste impact
   - Can evolve existing Product DNA platform towards goal
Bigger and broader benefits than ever

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<tr>
<th></th>
<th>Supplier/producer</th>
<th>Retailer</th>
<th>Household</th>
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<tbody>
<tr>
<td><strong>Waste reduction</strong></td>
<td>• Waste reduction through better e2e decisions</td>
<td>• £100m via targeted reduction compliance</td>
<td>• £500m via more products consumed before expiry</td>
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<tr>
<td><strong>Efficiencies</strong></td>
<td>• Collaborative logistics with visibility of e2e locations</td>
<td>• £25m labour saving in reductions</td>
<td>• Automated online shopping</td>
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<tr>
<td><strong>Availability</strong></td>
<td>• <strong>Higher OSA</strong> – visibility of out of rotation purchases expediting orders for expiring products</td>
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<tr>
<td></td>
<td>• <strong>Higher OSA</strong> – visibility of expiring products in household improving forecasts and orders</td>
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<tr>
<td><strong>Consumer protection</strong></td>
<td>• Improved facilitation of recalls via batch numbers</td>
<td>• Lower risk of fines from selling out of date products</td>
<td>• Lower risk of consuming unsafe products</td>
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<tr>
<td><strong>Sales / savings</strong></td>
<td>• Direct engagement with consumer</td>
<td>• Auto-replenishment</td>
<td>• Personalised reductions / promotions</td>
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<td>• Insight on behaviour</td>
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<td><strong>Other</strong></td>
<td>• Improved resilience and risk management</td>
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<td>• More ethical sourcing decisions</td>
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What next?

1. Share research with Retail sector
   - Challenges
   - Opportunities
   - Next steps

2. Build UK Food Waste community
   - ECR Europe
   - WRAP
   - Retail Grocery Advisory Board

3. Build ‘real world’ business case
   - Work with community
   - Identify participants to pilot with
   - Validate with the community

4. 2D barcode pilot with GO
   - Work with the Global Office GSMP team
   - Pilot 2D in the UK
   - Build results and validate business case