Honey authenticity: what needs to be done and the solution

What needs to be done

Greater confidence in honey testing processes requires a way to identify which reference database is being used when a sample is NMR tested, along with a means to verify the results while maintaining a laboratory's commercial confidentiality.

This scenario is explored further below with the data services and dashboard solution.

The solution

Work to date has focused on clarifying the scope and depth of the problem. These problems will continue to be considered and mechanisms incorporated to be addressed in the 'data and dashboard services' solution.

Ongoing activities addressing this include further investigation of NMR processes, further analysis of positions in the community, legal aspects and implications for these positions, and the mapping and modelling of what data needs to be captured and made securely accessible.

Data services

The research undertaken for this report has confirmed a coherent community willing to collaborate. These data services can play a role in enabling further collaboration.

Facilitated discussions can then be arranged that extract and interlink services between stakeholders. These services can address existing practices, overcome existing challenges and ultimately offer new business models that save money and create tangible benefits. This is a virtuous circle iterating between the social and the technical.

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A roadmap for collaborative approach

The proposed data services framework provides a roadmap for a collaborative approach that establishes a coalition of willing, community of interest and practice around:

- agreement about purpose

- interoperability of systems
- mapping operations between organisations
- governance and oversight among organisations (to include regulations and legislative compliance

Following the example of iSHARE in the Netherlands (see p6), and using the experience of other projects (such as Trusted Bytes with Innovate UK), funding for the data services framework would come through creating a not-for-profit body that would be self-sustaining through added-value services. Seed funding would come from existing government initiatives designed to support digital transformation and enable communities to collaborate on building services already shown to deliver value.

The following diagram captures the types of data that can flow between stakeholders in the honey supply chain, with their permission. This information has been distilled from our research and stakeholder interviews.

Data model

Port sampling data:

Permitted view:

- Anonymised Producer ID
- Batch ID
- Volume/Quantity

Upload:

- Port Location ID
- Sample test results (linked to Batch ID)
- Arrival/departure date
- Volume/Quantity

Honey Packer:

- Batch ID
- Producer ID
- Volume/Quantity
- Previous stops
- Arrival/Departure dates
- Sample test results
- Harvest date

Upload:

- Packer ID
- Batch Blend Data (uses pre-blend Batch IDs)
- Output Batch ID
- Destination (if possible)
- Label code

Production Data:

Permitted view:

- All stops/processors

- Arrival/Departure date
- Sample test results
- Test Centre ID
- End Destination

Upload:

- Producer ID
- Location
- Food Service
- Volumes
- Harvest Dates
- Batch ID

Consumer:

With code from Product, can view:

- Test result/composition
- Travel data (locations/dates)
- Harvest dates
- Food Sources
- Certifications

Regulation Data - Defra:

Permitted view:

- All

Upload:

- Regulation set/policy
- Testing centre data
- Producer business data
- Certificates issued by batch

Regulatory Compliance - FSA:

Permitted view:

- All

Upload:

- Test results (Historic)
- Producer compliance testing
- Packer compliance
- Enforcement actions
- Contamination data
- Additives identified
- Certificates issued

Testing data (with UKAS and NMR (private testing):

Permitted view:

- All

Upload:

- Test type (official/commercial)
- Results by sample
- Certifications
- Linked to production IDs
- Physical sample storage ID (physical sample stored for future testing)
-

Governance over visibility and access to data will be enabled by the community of participating members in the scheme.