Discovery

FOOD STANDARDS AGENCY

REGULATING OUR FUTURE •

Slice & Dicescope

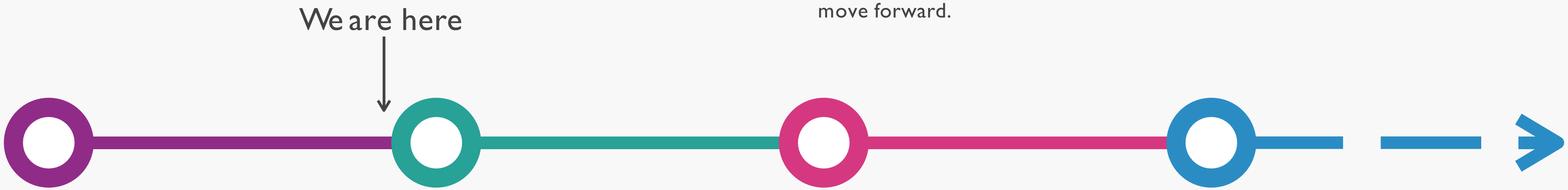
As part of implementing a new approach to food regulation, the FSA wants to identify businesses according to levels of risk, using this information to support a comprehensive register of food businesses across England, Wales and Northern Ireland.

We believe that the current registration of food businesses is not capturing the right information in the right ways to achieve this. Local Authorities are instead relying almost exclusively on local knowledge, implicit risk assessment and externally sourced data in order to build a picture of each food business and which one to treat as a priority to inspect.

Slice and Dice will look at how the collection of registration data can be improved and used to risk assess businesses. This will provide the FSA the nationwide view, give Local Authorities the detail they need and improve the service to Food Business Operators.

This involves determining the best way to capture/harvest the data to develop an overview of food businesses and developing the risk model and associated data to risk assess them.

We have now finished the Discovery phase, and are moving into Alpha. This deck summarises the findings from these 10 weeks and outlines how we will move forward.



Discovery

Where we try and work out what the problems are by speaking to users and experts.

Alpha

Trying out different ways to solve the problem until we find the right one.

Beta

Giving a few users access to the solution to see where it needs improving.

Live

Allowing more and more users access to the solution and collecting feedback to continually improve it.

Gather user and business needs in order to develop a deep understanding of the as-is context, the challenges to overcome and inform the design of what the digital service could look like

Approach summary

The work done throughout Discovery is collaborative by nature and puts emphasis on involvement of stakeholders and users, as well as a multi-disciplined project team. In order to deliver insights and solutions that are user-centric, fulfil the user needs and meet the business objectives of FSA we have worked according to these methods:

- A tailored agile and scrum approach throughout the 10 week period, with week long iterations each incorporating the planning, research and findings for that week and presented back to stakeholders to promote new ways of working within FSA.
- Working to GDS service standards and Discovery outline, ensuring we demonstrate a deep understanding of our users, their needs and journeys and centre the solution around realising value to these users.
- IBM Design Thinking, is an approach to ensure the solution is centred around user needs, in order to drive an experience driven design rather than a technical one. The framework has been developed to be used in conjunction with agile.
- A close feedback loop between iterations and user verification through regular contact with LA and FSA prospective users.
- Aligning with other projects and initiatives in FSA and wider government. This includes work done by Epimorphics and Wunder, the FSA surveillance project, government business registration and many more.
- Looking at best practice across the industry and related solutions in other industries to distill key learnings and common pitfalls.
- Throughout Discovery we have united the 3 work streams; technology, registration and segmentation, into one, as to have an integrated view of the potential solution and a holistic approach.

The users we have seen

People rely on government services to do important things. If they can't do them, it can cause significant problems. In turn, these problems can increase government costs and stop policies achieving their intent.
The better you understand your users, the more likely you are to design and build a service that works well for them.

There are 3 key user groups whom are affected by changes in this area.

We are conducting user research with each group to understand their current processes, practices and activities. This enables us to design a service that fulfils their actual needs and helps them in their work.

LOCAL AUTHORITIES

We started by focusing on **Local Authorities** first, as they are the collectors and maintainers of food businesses data as well as being responsible for quality assurance.

FOOD STANDARDS AGENCY

We then met with users from the **Food Standards Agency** who have a need to see national level data in order to evaluate policies, monitor LA performance and compliance, analyse food risk trends and patterns, and respond to change in the food market place.

FOOD BUSINESS OPERATOR

Finally, we have spoken to a variety of **Food Business Operators** from both large and small businesses. These users work in the food industry and interact with both enforcement officers and FSA for guidance, information and support as they register and operate their business.

Three types of users

LA

WE TALKED TO

- Doncaster Metropolitan District Council
- Nottingham City Council
- Norwich City Council
- Islington Borough Council
- Wiltshire County Council
- Belfast City Council

FSA

Meat & primary production

Incidents

Import & export

Internal audit

Assurance

FHRS team

Analytics

Food crime unit

EU exit

Policy

WE TALKED TO

8

TEAM LEADS

6

TEAM MEMBERS

FBO

WE TALKED TO

- Waitrose - Catering Food Safety Manager
- Waitrose - Food Hygiene & Safety Manager
- John Lewis - Compliance & Food Safety Manager
- Sainsbury's - Head of Safety & Insurance
- Sainsbury's - Administration Team member
- Itsu - Head of Health & Safety
- Sandwich bars - Owner
- Online protein supplements - Owner
- Cafe - Owner
- Cafe - Owner

Discovery findings

Registration questions vary in form and amount across LAs

We collected a registration form from all the Local Authorities we spoke to, as well as 24 others, in order to understand registration data consistency across LAs.

ALL 30 FORMS HAD

- Establishment Name
- Establishment Address
- Establishment post code
- Operator
- Business type
- Phone number

25+ FORMS HAD

- Declaration and signature of FBO
- Operator address
- Email address

10+ FORMS HAD

- Trading date
- First name
- Last name
- Import activity
- Companies House registration
- Foreign company registered abroad
- Legal status of company
- Proxy filling out the form on behalf of the FBO
- Position in business of person filling out form
- Is it a new business?
- Is it a seasonal business?
- Number of employees
- Mobile trader

LESS THAN 10 FORMS HAD

- Local Authority ID
- Registration date
- National Insurance number
- Companies House number
- VAT number
- Applying as individual or business
- Home country
- Limited company name
- Limited company address
- Number of vehicles or stalls
- Type of water supply
- Name of manager
- Opening days and times
- Ethnicity (for census reasons)
- Primary Authority
- Serving high risk customers
- Do you need advice about alcohol or labelling?
- Are you employing under 18s
- Residents above the premises
- Registration plate of mobile food van
- Address of mobile food van storage
- Business description
- Number of customers served per day
- Training
- Temperature monitoring
- Cleaning schedule
- Mobile food van trading location
- Trading name
- Name of landlord
- Previous name

What does this tell us?

There isn't an easy way for the FSA to consume data from the LA MIS, and there aren't many other meaningful and useful sources of open data to use to understand food businesses.

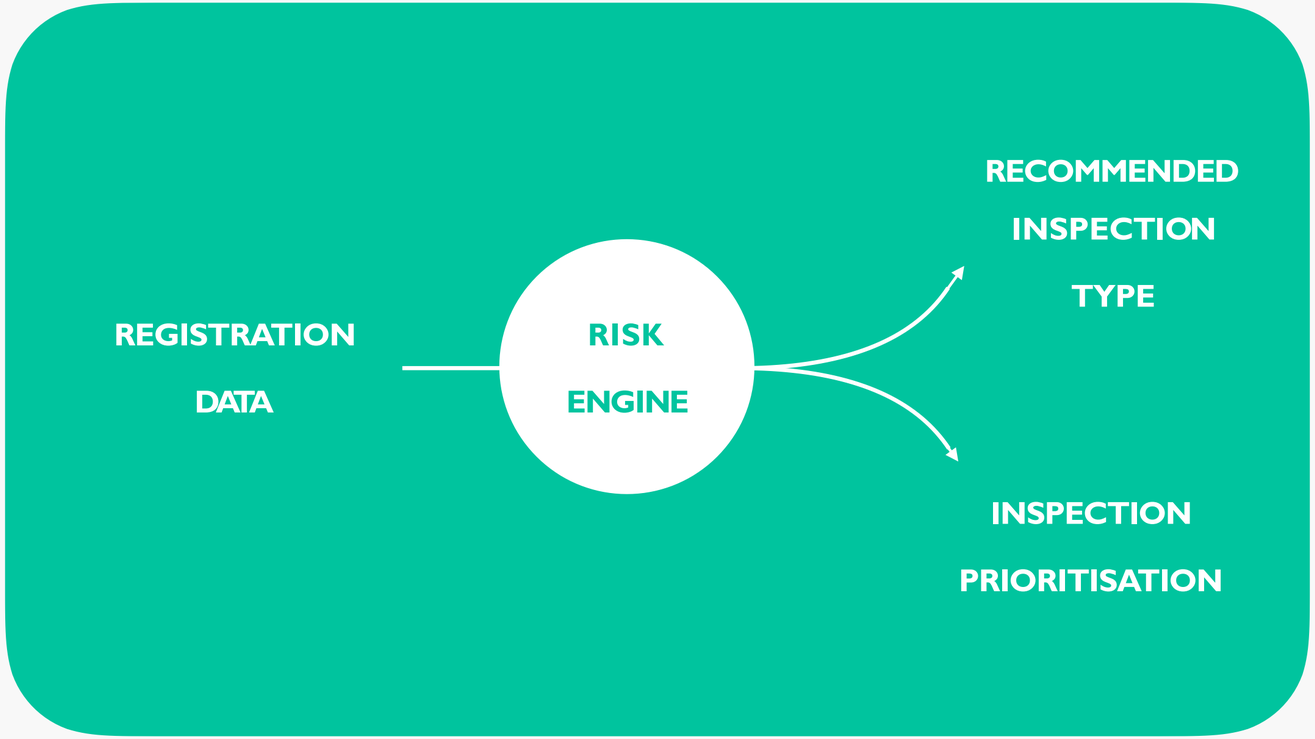
Risk engine

WHAT IS IT?

A risk assessment and scoring model at registration prior to the initial inspection.

WHAT WILL IT DO?

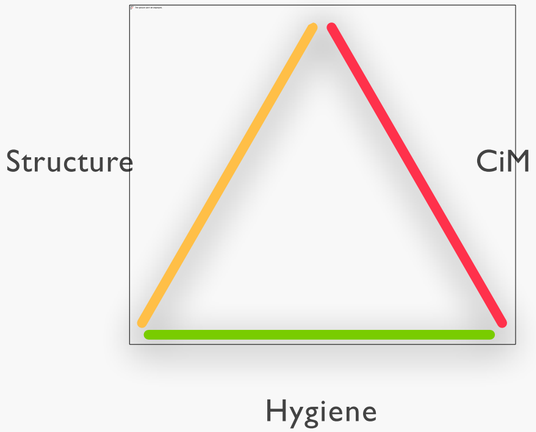
It enables us to create risk-based initial inspection plans and prioritisation through assessing new food businesses' potential risk.



Risk factors

Explaining how the risk score is assessed at registration

INHERENT RISK + **COMPLIANCE** + **IMPACT** = **FOOD BUSINESS RISK**



At the point of registration, the risk engine first assigns a base risk score to the new business based on its business type, and then considers information provided by the new business on the enhanced registration form to make adjustment to the risk score, which will give an indication if the business should have a Full inspection, Desktop inspection or Incidence-based inspection. It will also automate a suggested prioritised list of initial inspection for each LA, that can be manually adjusted, for example to account for local knowledge and capacity.

The base risk score will be developed for a set of food business types according to historical inspection data, and then validated by experienced food enforcement officers.

Discovery summary

We understand our user groups

We interviewed 48 users during our Discovery phase, so that we could gain a deep understanding of their current experiences in the areas of registration and risk assessment, as well as identifying the areas of friction and pain in the current experience. This holistic view of everyone's practices and activities has helped us to devise the to-be experiences for each of these user groups to address their needs whilst carefully considering the scope for the enhanced registration and unified view.
We collected user needs which will form the basis of our prioritised user stories, and when used in conjunction with the to-be journeys they become a powerful backlog of user needs to build out into a service.

WE TALKED TO

14 FSA USERS

11 FBO USERS

23 LA USERS

We understand the as-is technology landscape

Of the 387 Local Authorities, there are a variety of different management information systems used, different data collected at registration, and every LA has different ways of working. The LA MIS data transfer to the FSA in the form of FHRS and LAEMS is manual and very complex, and can take a lot of time and resources for the LA to complete each year.
We also discovered that the enforcement officers in the LAs sometimes check the FBO registration details against a variety of external sources including social media, online food distributors and search engines to validate their details and ensure they have the correct person and business.

WE FOUND

19 DIFFERENT DATA SOURCES USERS COLLECT FBO INFO FROM

We know how to quantify risk

We have explored and discarded a number of options for generating the initial risk scores, and based the initial concept model on the analysis of data currently collected by LAEMS. This allows us to statistically determine the most common risk ratings for each business type based on historical inspection data. We have tested ways in which this information can be applied during the registration process to assess new food businesses' potential risk prior to inspections in order to prioritise them better.
This has then been validated with experienced food enforcement officers. As more detailed data is collected at the point of registration, we can refine this model.

WE BUILT

1 RISK MODEL BASED ON CURRENT DATA