Lightning Talk

A look into a university IA project and the implication LLMs could have for students, lecturers and practitioners

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City St George's, University of London

London 2025

CHALLENGES OF CHANGE

WORLD IA DAY 2025
LOCAL CONNECTIONS. GLOBAL IMPACT.

A look into a university IA project and the implication LLMs could have for students, lecturers and practitioners

MARCH 10

MSc Human-Computer Interaction

Lou'Ay Souleimani

City, St George University of London

One of the longest-running and most successful programmes in the UK

The Centre for Human-Computer Interaction Design

Centre for HCID founded in 1991

MSc Human Centred Systems established in 2004

About myself

Behavioural Economics and Decision Making

BSc (Hons) in Psychology from City, St George University of London

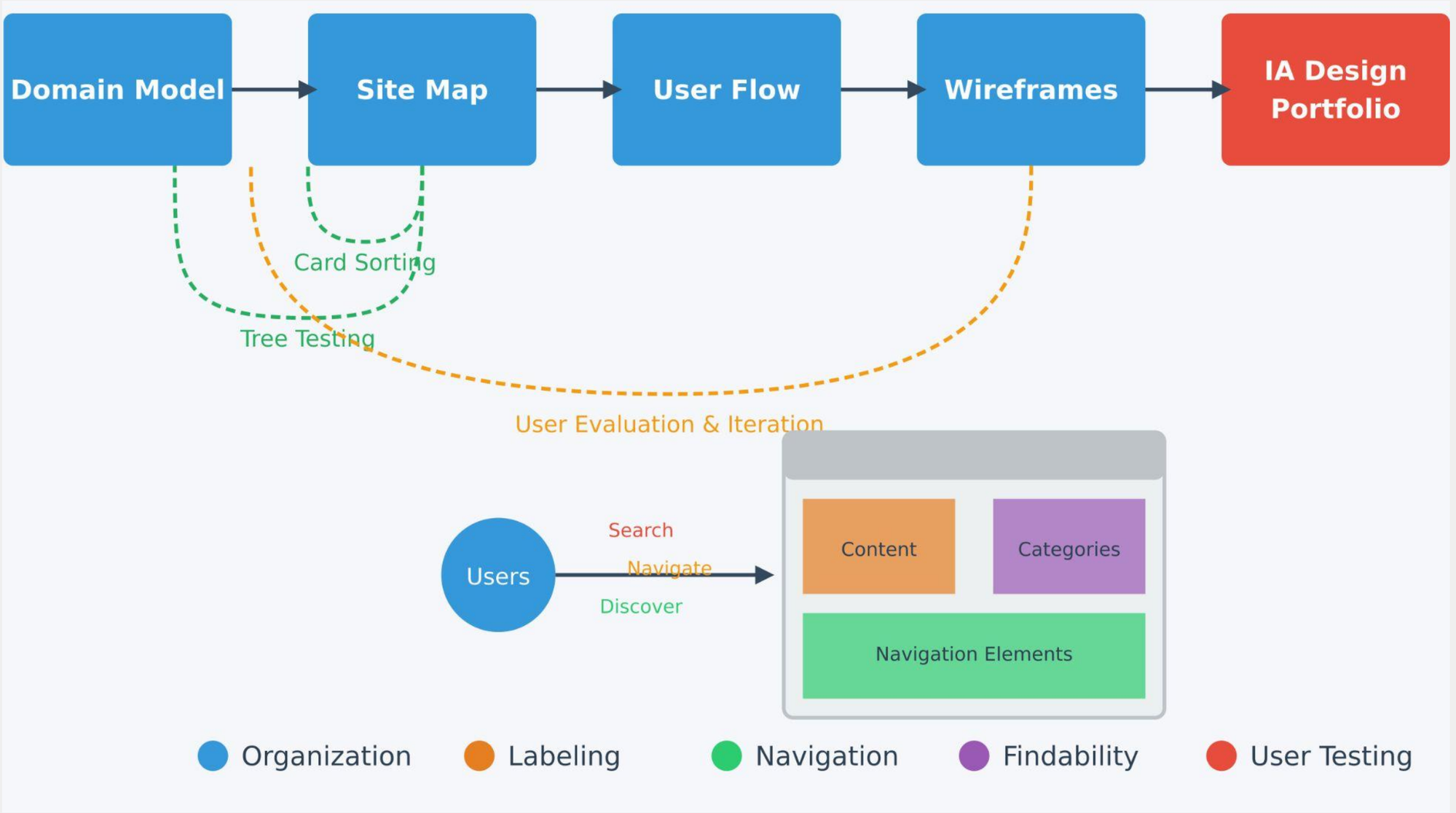
Developed strong interest in Behavioural Economics and Decision Making

From the MSc HCI, gained theoretical knowledge and hands-on experience

01 IA PROJECT

02 AI’S POTENTIAL IMPACT

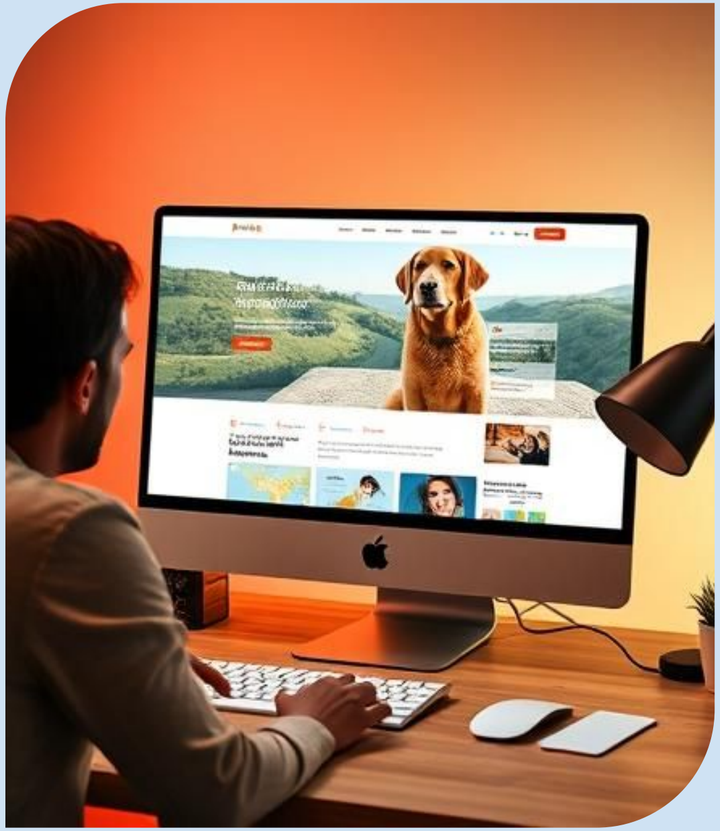
03 CHALLENGES OF AI


Domain Model
Site Map
User Flow
Wireframes
IA Design Portfolio
Card Sorting
Tree Testing
User Evaluation & Iteration
Users
Search
Navigate
Discover
Content
Categories
Navigation Elements
Organization
Labeling
Navigation
Findability
User Testing

THE BRIEF

MY DOMAIN

Research Process – Domain Model

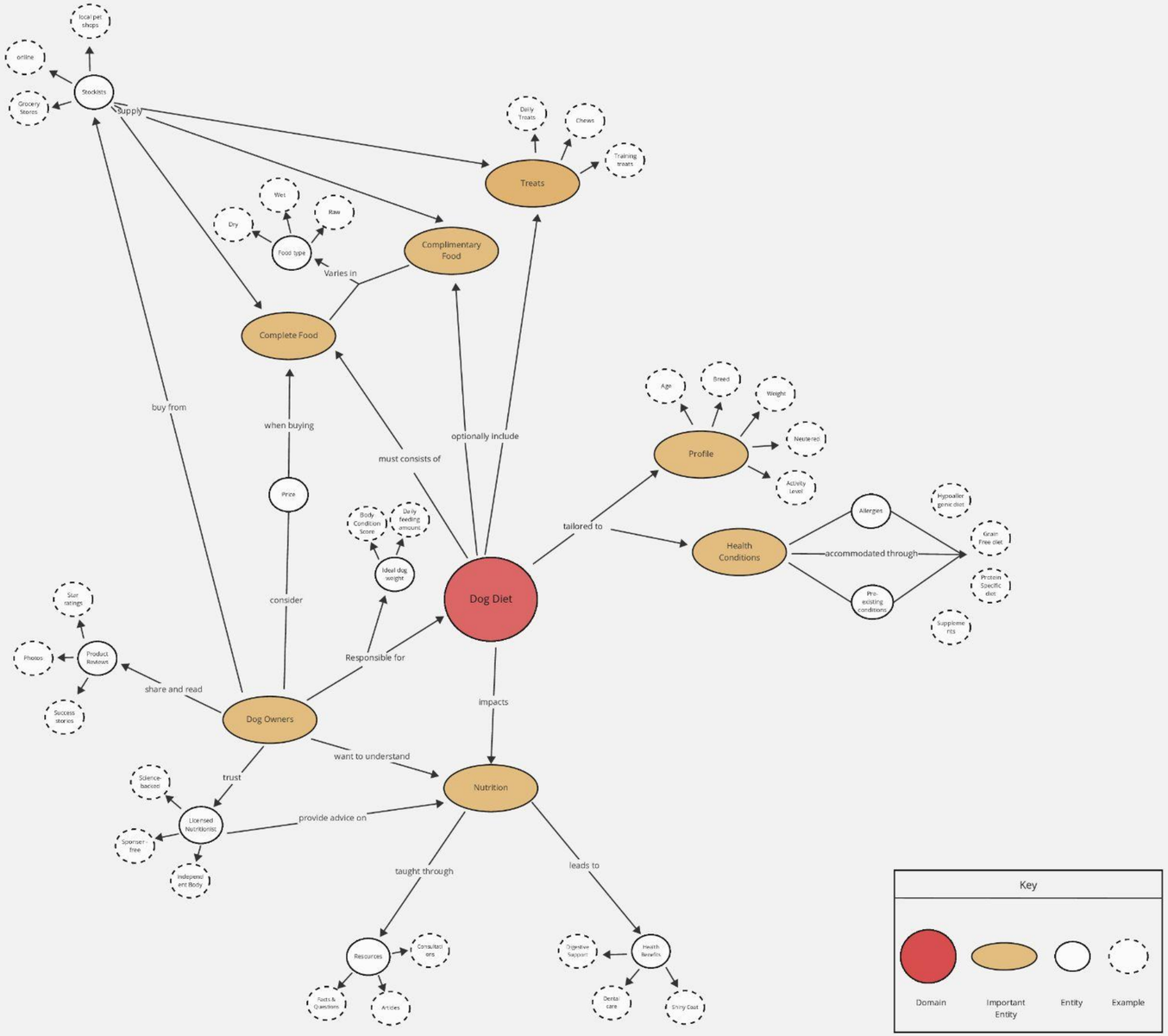


Desk Research

Semi-Structured Interview

Developing Domain Model

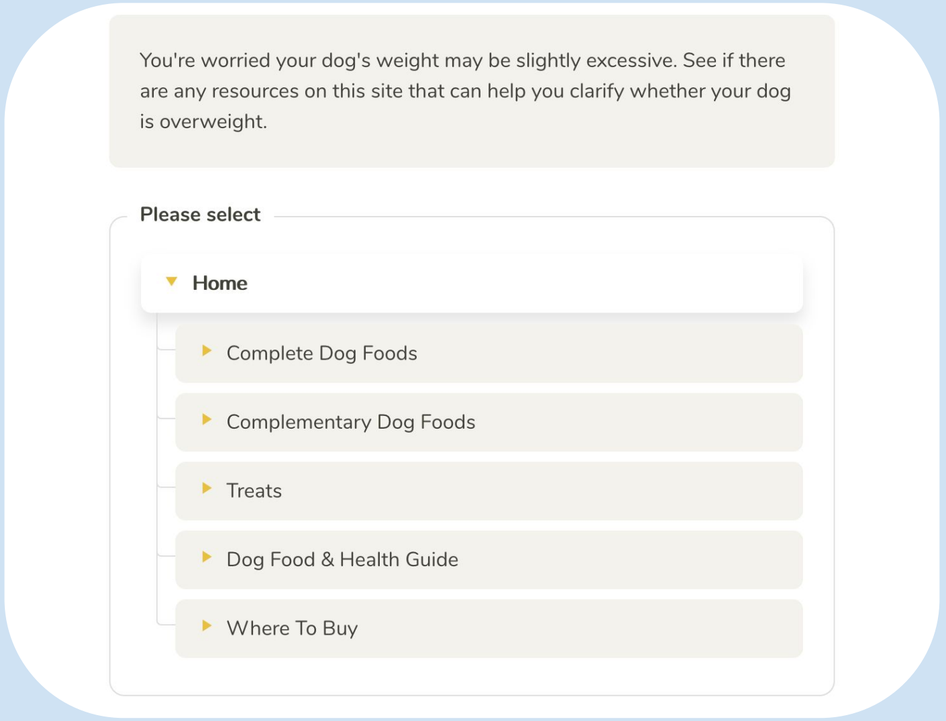
Domain Model



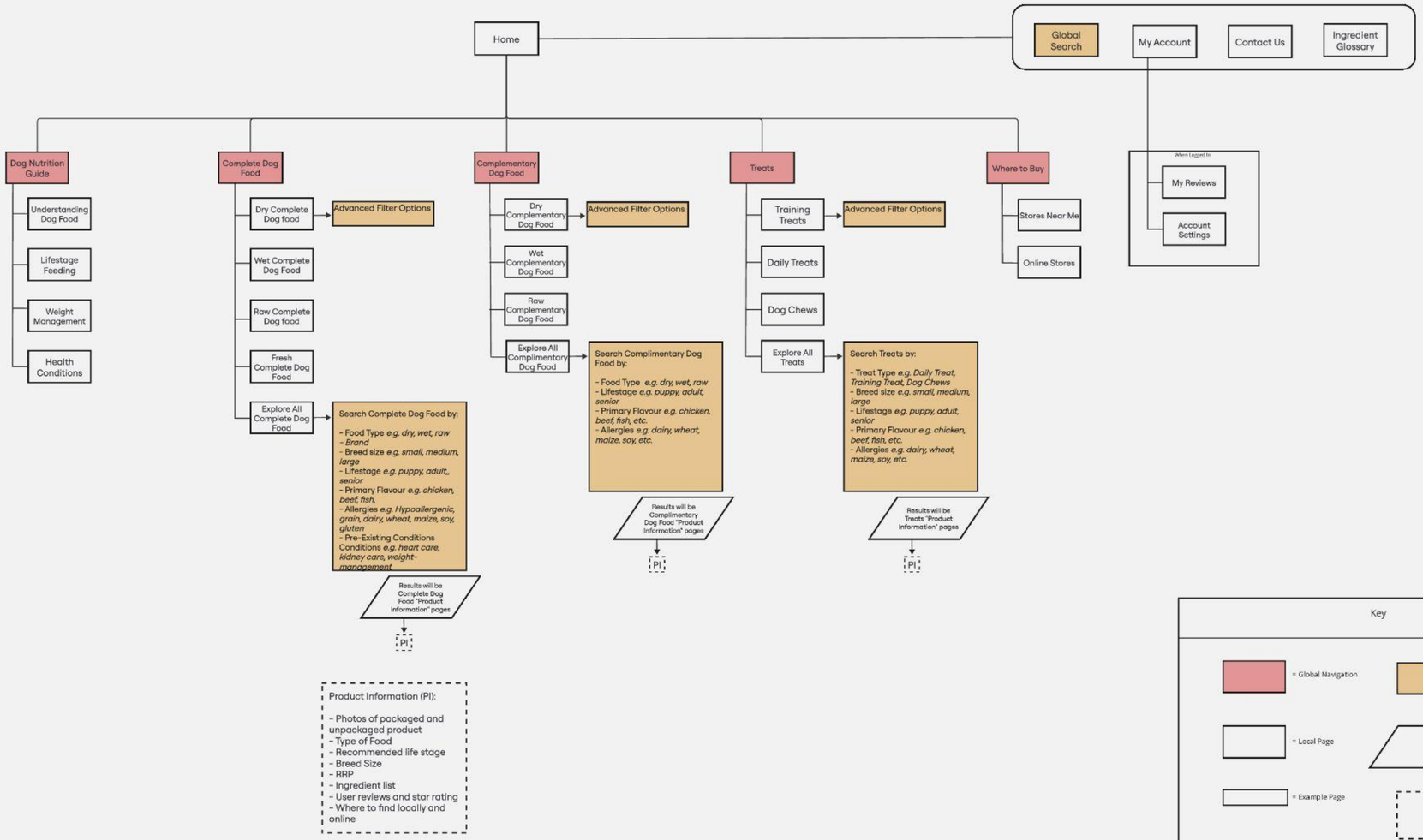
DOMAIN MODEL

Research Process – Sitemap

Card Sorting



Tree Testing


Home
Global Search
My Account
Contact Us
Ingredient Glossary
When Logged In
My Reviews
Account Settings
Dog Nutrition Guide
Understanding Dog Food
Lifestage Feeding
Weight Management
Health Conditions
Complete Dog Food
Dry Complete Dog food
Advanced Filter Options
Wet Complete Dog Food
Raw Complete Dog food
Fresh Complete Dog Food
Explore All Complete Dog Food
Search Complete Dog Food by:
- Food Type e.g. dry, wet, raw
- Brand
- Breed size e.g. small, medium, large
- Lifestage e.g. puppy, adult,, senior
- Primary Flavour e.g. chicken, beef, fish,
- Allergies e.g. Hypoallergenic, grain, dairy, wheat, maize, soy, gluten
- Pre-Existing Conditions Conditions e.g. heart care, kidney care, weight-management
Results will be Complete Dog Food "Product Information" pages
PI
Complementary Dog Food
Dry Complementary Dog Food
Advanced Filter Options
Wet Complementary Dog Food
Raw Complementary Dog Food
Explore All Complimentary Dog Food
Search Complimentary Dog Food by:
- Food Type e.g. dry, wet, raw
- Lifestage e.g. puppy, adult, senior
- Primary Flavour e.g. chicken, beef, fish, etc.
- Allergies e.g. dairy, wheat, maize, soy, etc.
Results will be Complimentary Dog Food "Product Information" pages
PI
Treats
Training Treats
Advanced Filter Options
Daily Treats
Dog Chews
Explore All Treats
Search Treats by:
- Treat Type e.g. Daily Treat, Training Treat, Dog Chews
- Breed size e.g. small, medium, large
- Lifestage e.g. puppy, adult, senior
- Primary Flavour e.g. chicken, beef, fish, etc.
- Allergies e.g. dairy, wheat, maize, soy, etc.
Results will be Treats "Product Information" pages
PI
Where to Buy
Stores Near Me
Online Stores
Product Information (PI):
- Photos of packaged and unpackaged product
- Type of Food
- Recommended life stage
- Breed Size
- RRP
- Ingredient list
- User reviews and star rating
- Where to find locally and online
Key
= Global Navigation
= Search, filter or input function (not a page)
= Local Page
= Results Page
= Example Page
= Dynamic Page

SITEMAP

Wireframe 1: Understanding Dog Food

Understanding Dog Food

Complete Dog Food

Complete dog foods are specially designed to provide all the essential nutrients your pet needs in a single meal, to help maintain their health and fitness. Feeding your dog a complete food tailored to their life stage ensures they receive all the necessary nutrients over time, making it a convenient choice for dog owners. This includes nutrients such as protein, fats, carbohydrates, vitamins and minerals.

In the UK, the European Pet Food Industry Federation (FEDIAF) sets the guidelines for complete dog food. Products will be labelled as 'complete' making them easy to find. However, the quality of complete dog foods can vary widely, ranging from poor to excellent, so pet owners need to choose carefully. They usually come in the form of dry, wet, raw and fresh.

Complementary Dog Food

Complementary dog foods are not complete, and don't contain the full range of nutrients to help maintain a pet's health and fitness. They are rich in certain substances but lack the balance needed to meet all of a dog's dietary requirements when fed on their own. They must be mixed with other food to provide a nutritionally complete and balanced diet for dogs.

Similar to complete foods, products will be labelled as 'complementary', making them easy to distinguish. However, some complementary foods may closely resemble complete foods in appearance, so it's essential to read the labels carefully before purchasing. They usually come in the form of dry, wet and raw.

Types of Dog Food

Dry

Dry food is a popular option of dog food, so much so, that the majority of dogs in the UK are fed on this type of food. This is due to their convenience of being readily available in almost all pet stores and major supermarkets. They have a long shelf life, and don't require are special preparation before serving.

Dry food is most commonly prepared through a process called extrusion. This is when raw materials and ingredients are grounded, mixed into a dough, and cooked under heat and pressure in an extruder.

Pros:

- Dry food tends to be a much more financially viable option compared to other types of dog food.
- It is very easy to transport and feed if you're travelling or away from home.

Cons:

- Although high quality dry food exists, some low quality dry food consist of fillers, artificial additives and preservatives, which may not fully support a dog's overall health.
- Some dogs, especially picky eaters, may not find this type of food appealing. They may prefer foods with more moisture level.

Wet

Wet foods usually come in the forms of pouches or cans. They are more palatable and appealing to dogs, due to their moisture-rich content and soft texture. They usually consist of cooked meat, vegetables and grains, and often have added vitamins and minerals to make it's content nutritionally complete.

Pros:

- Wet food often have a more appealing smell, taste and texture compared to dry food. This poses an advantage and viable option for picky eaters.
- Dogs with dental issue could find it hard to grind and chew dry food. The texture of wet food can ease the process of eating. This is because it is more gentle on their teeth and gum, allowing them to eat their daily meals with comfort.

Cons:

- Wet food have a shorter shelf life once opened, and needs to be refrigerated for a few days, before being thrown away.
- Wet food is generally more expensive than dry food, due to its higher meat content and moisture level, packaging becomes more costly for manufacturers.

Raw

Raw dog food dates back to dog's ancestral diet, which consists of raw meat, bones, organs and vegetables. This is believed to closely replicate what dogs would have eaten out in the wild. Is it often regarded as the most natural means of feeding a dog.

As natural and popular as they are, raw feeding is the most controversial method of feeding dogs. Numerous vets and industry experts have expressed concerns about the safety and nutritiously complete raw foods are.

Pros:

- Raw dog food rarely requires any additional Omega-3 fatty acids, vitamins and minerals, as they are supplied naturally from ingredients.
- Some pet owners feeding their dogs a raw diet have noted improvements in coat quality, skin health, and energy levels.
- Supporters of this diet feel that it goes hand in hand with a dog's evolutionary needs and can support and encourage overall health and fitness.

Cons:

- Raw food is not easily transportable. They come frozen in containers, and have to be stored in a freezer. This means they cannot be eaten upon arrival, as they have to be put out to thaw, either in a refrigerator or in cold water.
- If not handled properly, raw dog food could run the risk of giving bacterial contaminations to dogs, such as Salmonella or E.coli. They must be handled with care and to minimise the risk of infection.

Fresh

Fresh complete dog foods include high-end and fresh ingredients. They are essentially home-cooked food that can be bought as ready-made meals in the form of trays or pouches. These are a relatively new type of dog food, that is becoming more popular amongst owners who don't have the time to home cook meals for their dogs.

Pros:

- Fresh food maintain their nutrition due to its gentle production process. This is because they are cooked at lower temperatures than dry food, ensuring its preserved nature.
- There are quite a lot of recipes and flavours available. This is beneficial to picky eaters, as they are provided with several different options.

Cons:

- Due to their convenience and high nutritional value, they are quite costly when compared to their counterparts. They tend to be more expensive than dry or wet food.
- Fresh food is not easily transportable. They come frozen in containers, and have to be stored in a freezer. This means they cannot be eaten upon arrival, as they have to be put out to thaw, either in a refrigerator or in cold water.

Treats

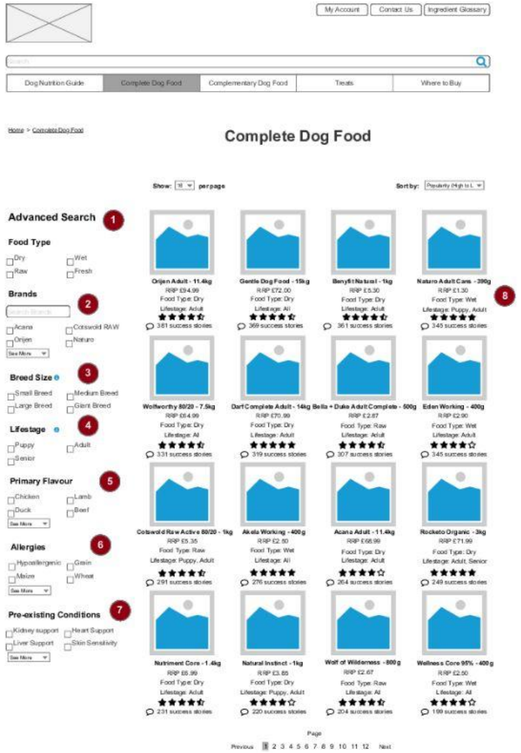
Dog treats are a food that is typically used as a snack, reward or training tool. They can be used to strengthen the bond between owner and dog, and is a sign of affection. If a dog is food motivated, it can be an excellent tool to help train obedience or tricks.

Daily Allowance:

A dog's daily treat allowance should be no more than 10% of their total daily calorie intake. For instance, if your dog needs 1 100

1. Utility Navigation, including ingredient glossary for quick access from any page
2. Global navigation displaying the content users can access
3. Drop-down navigation allowing users to see subcategories
4. Local navigation option, which contextually details the explanation dog food faces

Wireframe 2: Browse All Complete Dog Food



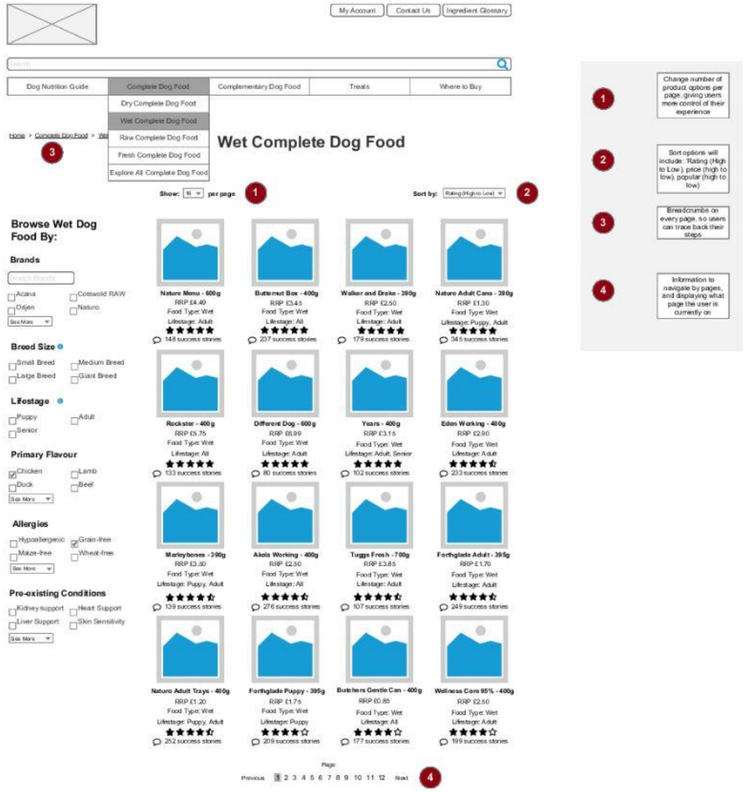
1. Advanced search options to personalise and tailor search to dogs
2. Option to tailor search and show specific brands. 'See More' option display all these brands
3. tag near filter option will explain the sizes of dogs in terms of measurement. For example: 'small' dogs are between 15 - 110 cm at shoulder
4. tag near filter option will explain the age of dogs in terms of years. For examples: 'adult' is between 2 - 7 years old
5. 'see more' will show all primary flavours. These will also include: Turkey, Tripe, Fish, Rabbit, Venison
6. 'see more' will show all allergies. These will also include: dairy, beef, chicken egg, chicken
7. 'see more' will show all pre-existing conditions. These will also include: diabetes, thyroid disease
8. Detailed initial description of product, so users can get a general idea of suitability for their dog

WIREFRAMES

POWERPOINT

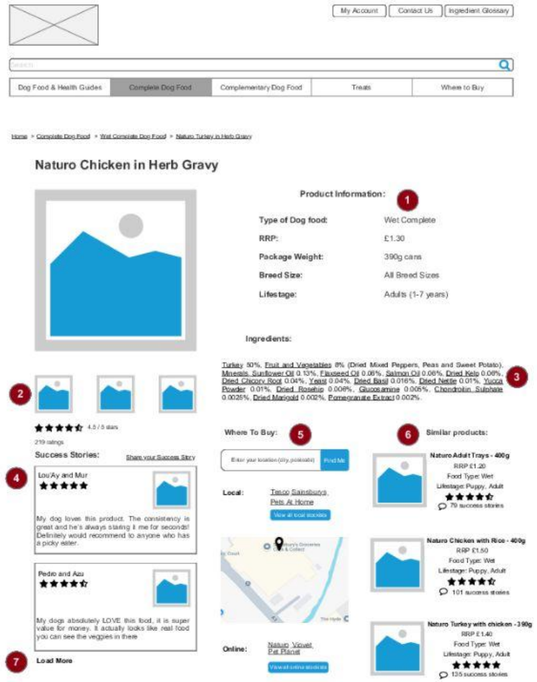
IA Project

Wireframe 3: Browse by Wet Complete Dog Food



1. Change number of product options per page, giving users more control of their experience
2. Sort options will include: 'Rating (High to Low), price (high to low), popular (high to low)
3. Breadcrumbs on every page, so users can trace back their steps
4. Information to navigate by pages, and displaying what page the user is currently on

Wireframe 3: Naturo - Product Information Page

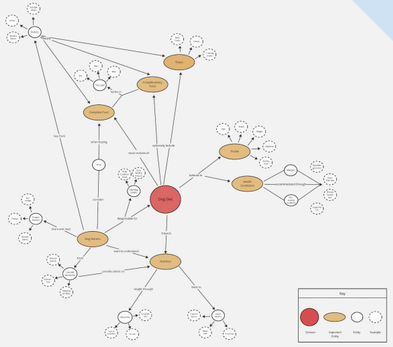


1. More information about product, so users can better evaluate product
2. Various images of product, so users can better assess texture and look
3. Ingredient list showing percentage composition of each ingedient. Each ingredient is hyperlinked to position in ingedient glossary for fast navigation and quick access to information
4. Detailed description of people's experiences with photos of their dogs eating dog food. Allows users to learn from other's experiences and make more informed decision
5. Users can quickly get access to where product can be found, locally and online. Can get more details and options with provided 'view all' link, taking them to 'where to buy page'.
6. If users find suitable product, website can suggest similar items for improved product discovery and efficient navigation to similar items
7. Option to load more reviews, allowing users to read more success stories.

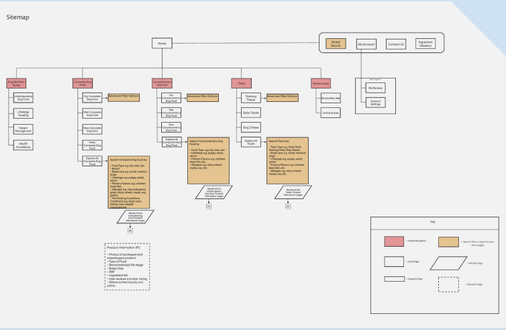
WIREFRAMES

Reflection of IA Project

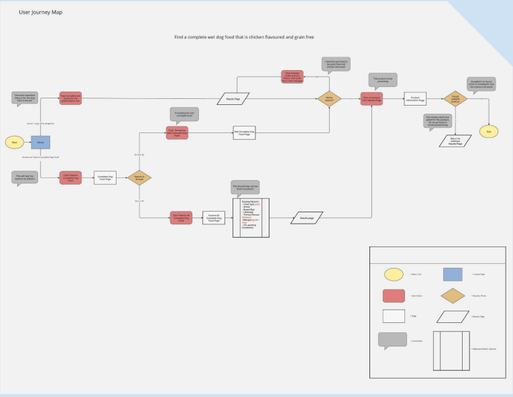
Domain Model



Sitemap

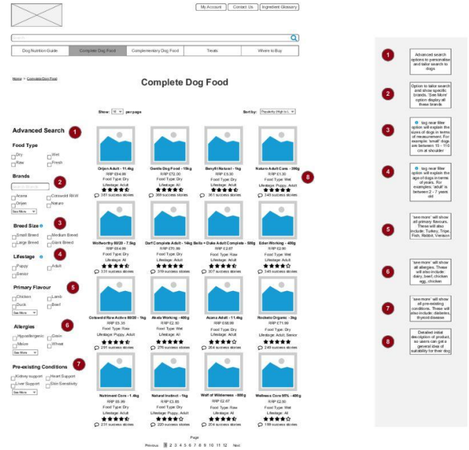


User Journey Map

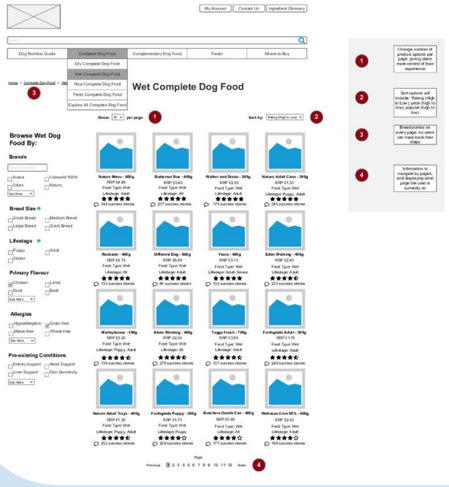


Wireframe 1: Understanding Dog Food

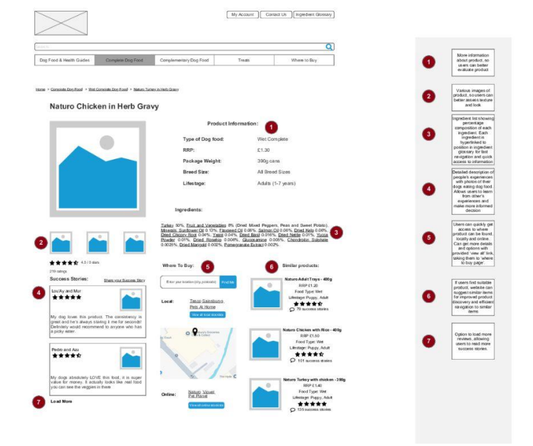
Wireframe 2: Browse All Complete Dog Food



Wireframe 3: Browse by Wet Complete Dog Food



Wireframe 3: Naturo - Product Information Page



The Use of AI and LLMs at University

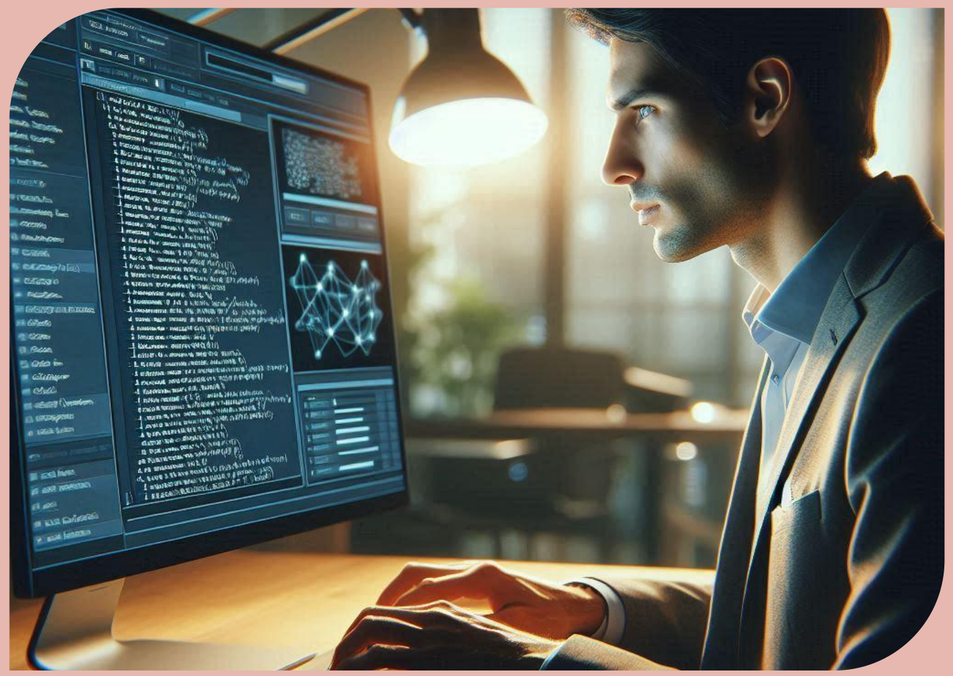
User Agent leveraging AI

Use of AI was optional, but had to be stated

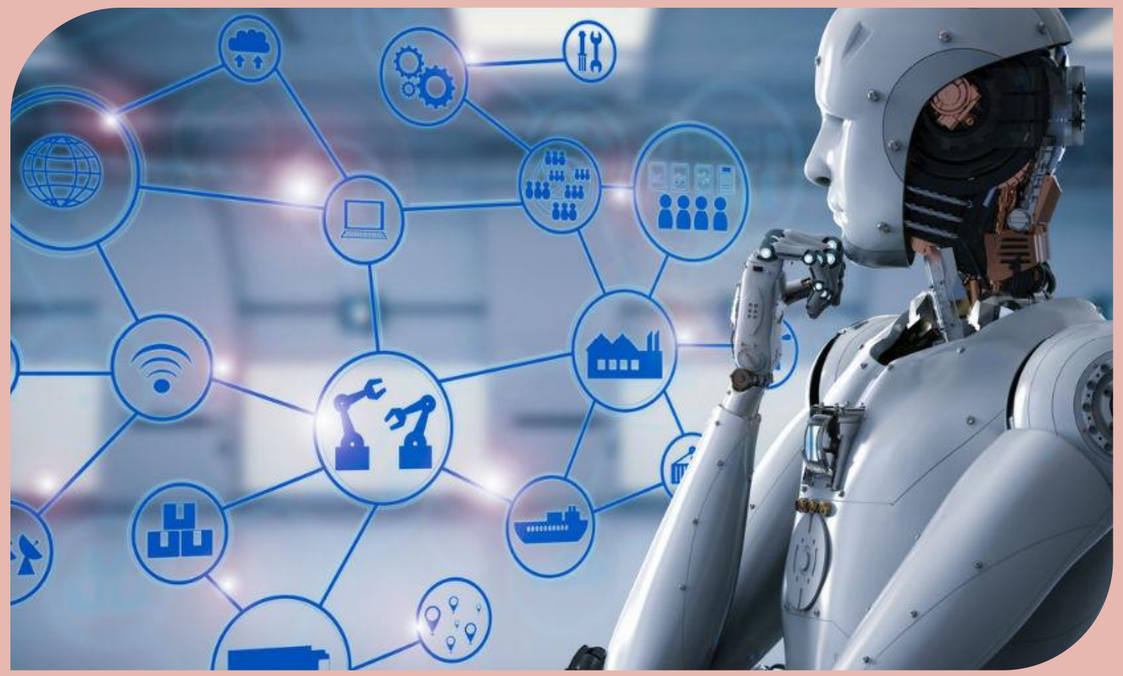
Could not be used to generate data, such as interviewing artificial domain expert

In hindsight, would be interesting to see whether an LLM could analyse wireframe evaluation

Leveraging LLMs for Data Analysis



User researcher giving prompts to a LLM



AI analysing Data

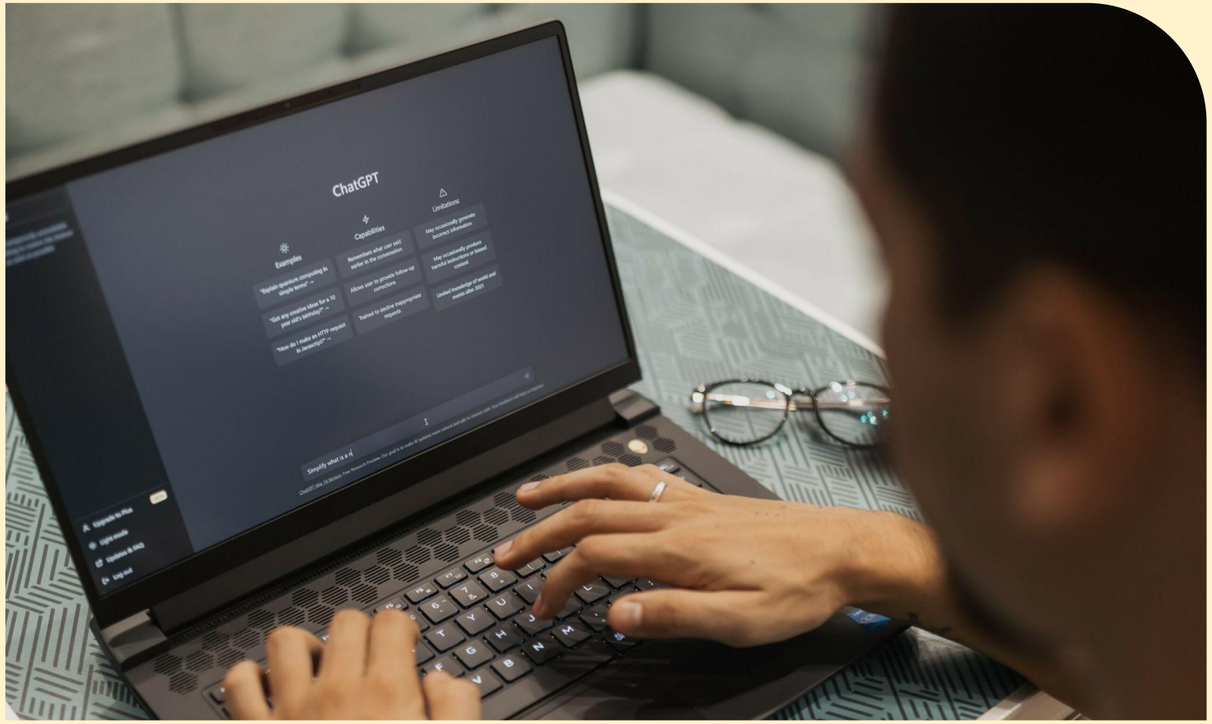
University Dilema

Lecturer teaching human and AI robot students

Universities want their students ready for the future.

Could this come at a cost of missing discipline fundamentals?

The wider context of LLMs



Prompt engineering via Chat GPT

User research experience is *KEY*

Inexperienced researchers may make mistakes like inaccurate prompts or overlooking data issues

This poses risks but also presents opportunities for qualitative research with LLMs.

Closing Remarks

HCID writing retreat

User Research Workshop

Thank You

Lou’Ay Souleimani

MSc Human-Computer Interaction