USER EXPERIENCE DESIGN PORTFOLIO

August 2017

ABOUT ME

I'm an enthusiastic UX designer who specialises in design and research for complex, interactive digital products and services.

My last two projects were a trading platform and HMRC's corporation tax filing system. Those are the scale of problems I like to tackle — Sales and marketing websites aren't really my cup of tea.

This has led me to specialising mostly, but not exclusively, in financial services and the public sector. Working on large projects has given me much experience of working in modern Agile environments, embedded in multidisciplinary Scrum teams.

I consider myself a well-rounded UX designer with ample experience of both research and design — from diary studies and lab-based user research to sketching and developing highly interactive and technical prototypes.

For me, the research side of things is not only crucial but often it's also the most interesting part. I love the thrill of coming up with innovative solutions to a problem, but most of all I like spending time with users and working out what makes them tick.

Guildford, Surrey

me@petewilliams.info

07828 926 361

CV available at http://cv.petewilliams.info (PDF)

CLIENT LIST

IG

HM Revenue & Customs

HALIFAX

LLOYDS BANKING GROUP

LV=

BANK OF SCOTLAND

RIAS

SCOTTISH WIDOWS

PRUPROTECT

bright grey
Protection. We make it personal

John Lewis

ORACLE

ageas

McDonald's

SAMSUNG

Transport for London

DESIGN PROCESS

The process I follow largely depends on the project at hand and exactly what is required. However at a high level, most projects tend to follow the same design-thinking model.

The model, adapted from The Design Council's Double Diamond model, shows the four key phases of the process — Discover, Define, Develop and Deliver. These activities consist of two different types of thinking - divergent and convergent.

Discover - A divergent and exploratory activity which uses research to gain insight into the user and business needs in order to identify a number of opportunities for innovation.

Define - A convergent activity which defines exactly which problem(s) we are trying to solve by aligning user needs to the needs of the business and understanding where the greatest value lies.

Develop - A second divergent activity in which multiple solutions to the defined problem are developed, prototypes and evaluated.

Deliver - Finally converging on the best solution, working out the low-level details and working with the developers to deliver it.

The last two phases typically go through an iterative cycle based on testing.

THE PROBLEM

THE SOLUTION

DISCOVER   DEFINE

DEVELOP   DELIVER

IDEATE   PROTOTYPE   TEST
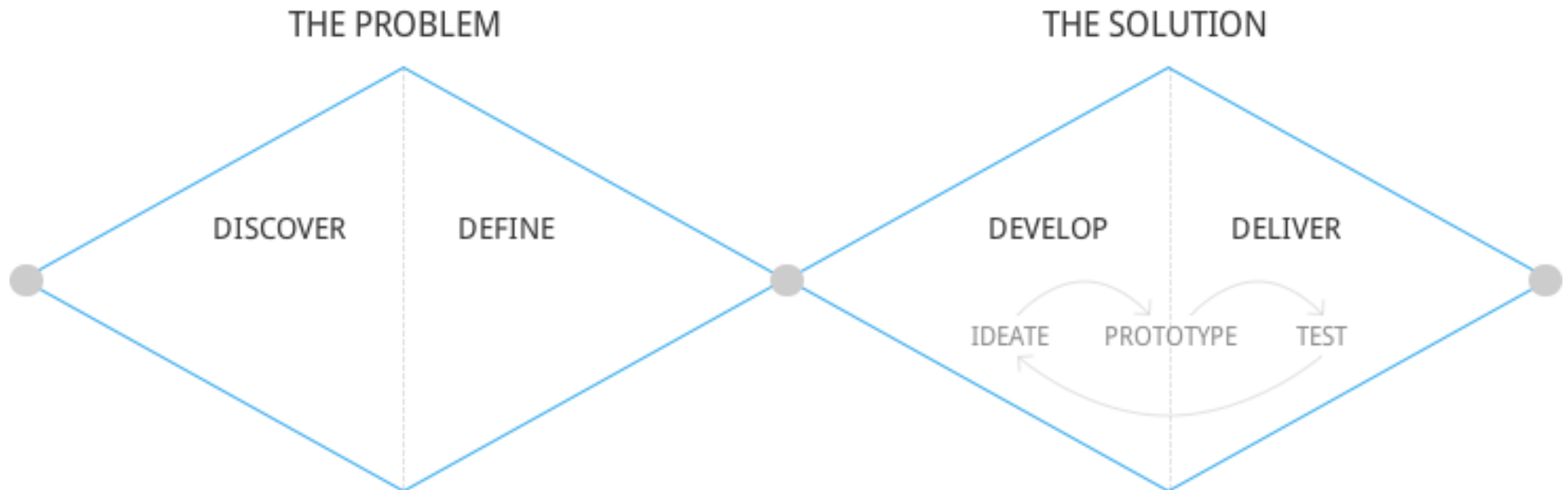
CASE STUDIES

IG - TRADING PLATFORM

ABOUT THE PROJECT

IG are the leading provider of financial spread betting and CFD trading. Their existing web trading platform was starting to show its age and the competition were catching up. IG wanted to solidify their place at the top with a new trading platform more focused around a trader's needs.

I was originally bought onto the project on a 6 month contract to work in a scrum team who were to define the overall paradigm and structure of the platform — would it be a fixed layout or customisable, how would you customise it, how would the navigation work, and so on.

I ended up being promoted to Lead UX and stayed over 2 years, looking after all aspects of the platform. As such, my work involved both developing and maintaining a long-term vision for the future of the platform, along with sprint-based work solving specific user needs with the team.

There were many challenges involved, not least the complex nature of the subject matter and designing for a massively diverse range of users.

Although development continues, the new platform has been released with excellent results — users are trading more and to a higher value.

IG - TRADING PLATFORM
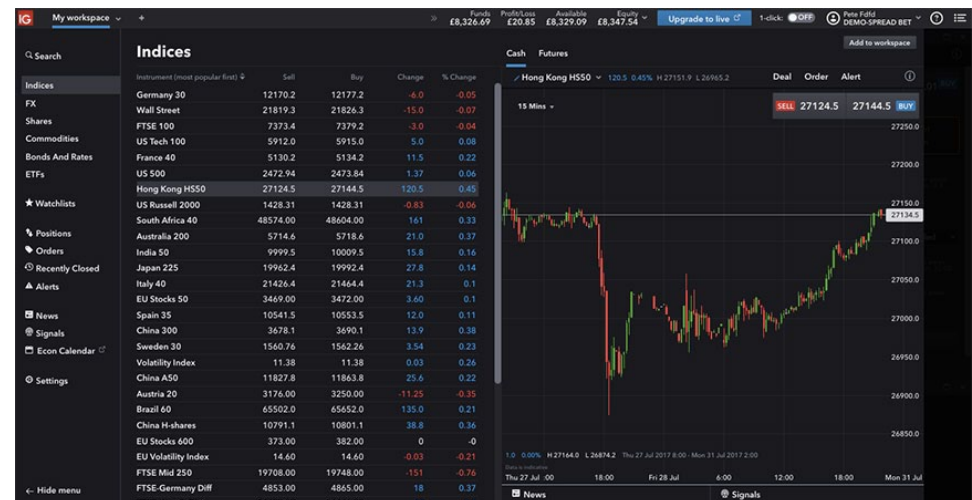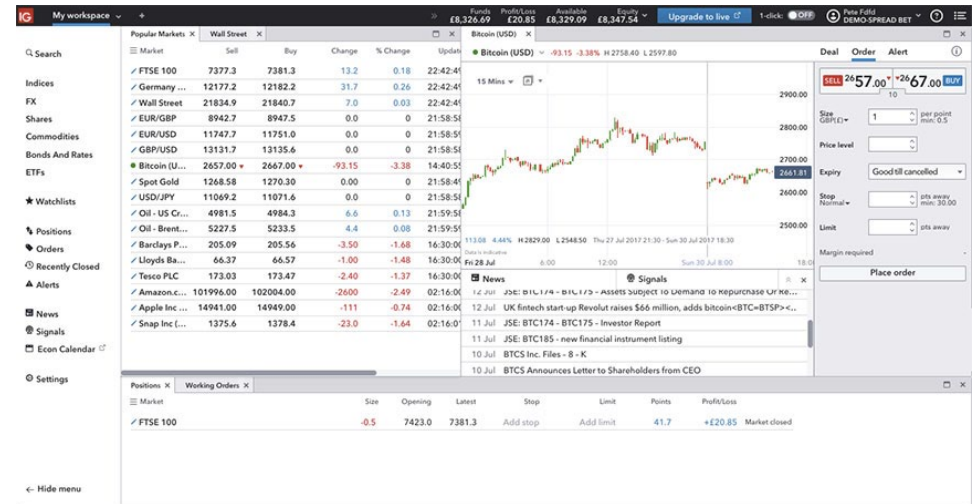
RESEARCH

I came into the project mid-discovery phase to find an Alpha was under development which was largely based around assumptions rather than research. The project also appeared to lack a long-term vision.

To address this, I organised a user research programme to evaluate the assumptions and their resulting designs and implementations.

The research process involved
- Writing a recruitment brief for our data analysts to find suitable clients
- Creating a screener for an agency to recruit and schedule the clients
- Liaising with legal to produce an NDA
- Producing a discussion guide
- Setting up a test lab and remote viewing facility
- Organising and encouraging viewing by team members and stakeholders
- Analysing the research and presenting findings
- Organising participant payments
- Documenting a detailed process for both remote and in-house research

IG - TRADING PLATFORM
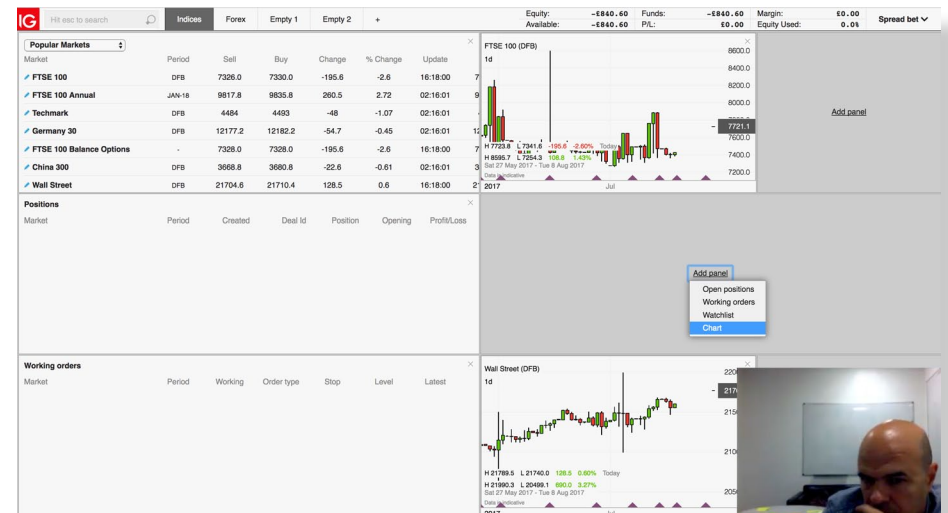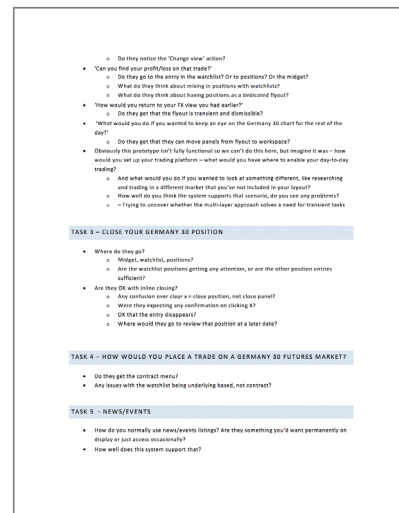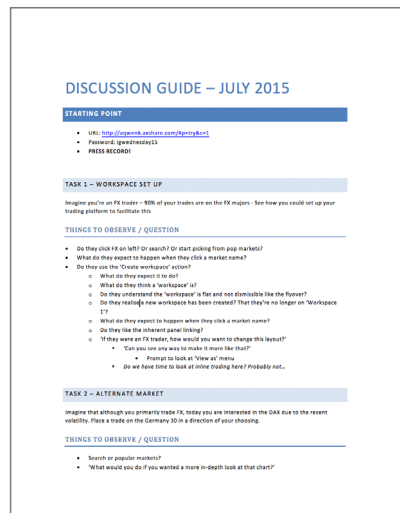
DEFINING A PRODUCT VISION

The research found that many of the assumptions made were untrue, and the Alpha platform struggled in testing.

After a series of workshops and sketching sessions, I came up with a new vision for the platform, demonstrated and validated in a pair of prototypes.

The first prototype was built in JavaScript and demonstrated complex concepts and new paradigms to team members and stakeholders in order to gain buy-in to the new vision. The core concept being that the platform should be market-centric rather the previous UI-centric approach.

The prototype was very well received by the team and wider stakeholders who were impressed something so complex could be built by a designer.

Having achieved buy-in from senior stakeholders, the next task was to build a lower-level prototype that fleshed out some of the concepts into something we could test with real users.

This was created as a shared Axure RP so that other who were working on, for example, the charts or the deal ticket, could feed into it.

This single-page prototype was highly functional and very much pushed Axure to its limits, but gained invaluable insight from testing. In doing so it helped form a solid product vision.

Both these prototypes are best demonstrated in person, but video demos can be seen at http://portfolio.petewilliams.info/videos.

IG - TRADING PLATFORM
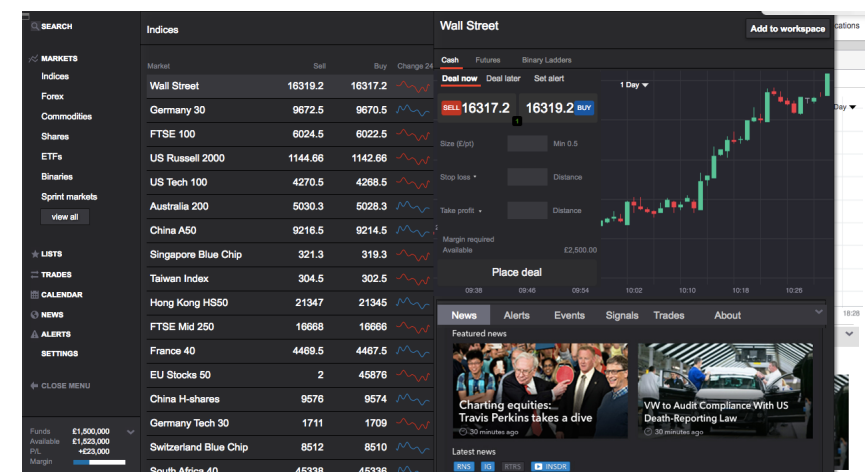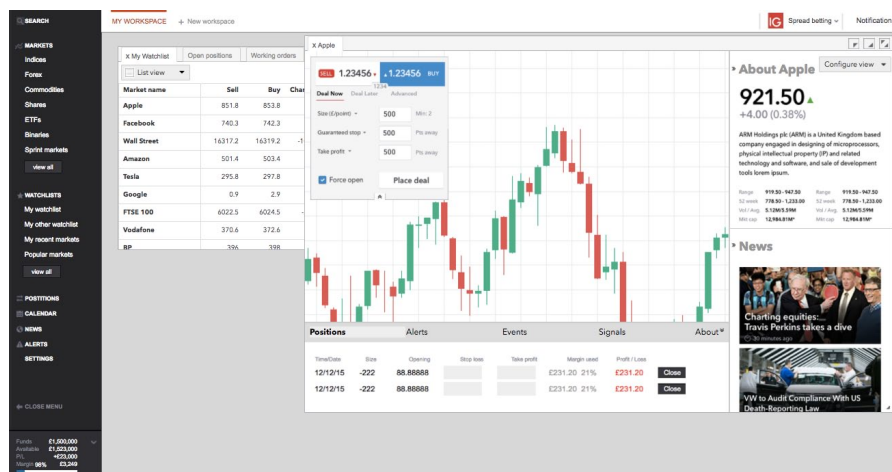
NEWS & EVENTS - INTRO

As well as maintaining the product vision, much of my work at IG involved working closely with Scrum team in sprints to solve specific problems. News & Events was one such area.

IG's in-platform news and event coverage had traditionally been quite poorly-regarded and this was something we wanted to address in the new platform. The following outlines key parts of the process that I followed to do this.

NEWS & EVENTS - STAKEHOLDER INTERVIEWS

I arranged a series of interviews with stakeholders including our traders, analysts, journalists and customer service staff as well as speaking to some users while testing other work.

This allowed me to agree with stakeholders where we can add the most value for our users. In doing so, I defined key principles for what our news facility should be, along with high-level user needs to target.

Principles

Focus on the right news at the right time

Right news
• Be bespoke - Content should focus on the news/markets that matter to that specific user
• Be focused - Support easy filtering between analysis and commentary as they appeal to different types of traders (TA v fundamental)
• Be contextual - Provide news about the market, or group of markets the user is looking at
• Be distinct – Shouldn't dilute the lower-volume, higher-importance notifications such as alerts

Right time
• Be responsive – Quickly inform the user of:
• Major events/movements – both expected and unplanned
• Specific news/events the user have declared an interest in
• Be proactive - support common tasks for set times such as pre-opening
• Be timely - Display news relevant to the task the user is doing at that moment

Core user needs

As a trader I need to catch up on what's happened since I last looked, so that I can understand any movements in my markets and consider what might happen next

As a trader I need to see what news/events are expected in the markets today, so that I can plan my trading/focus for the day

As a trader I need to find news and commentary about specific markets, so I can make informed trades

As a trader I need to find news and commentary about the asset classes that interest me, so I can find markets to trade in

As a trader I need to find news and commentary about specific asset classes, so I can find markets to trade in

As a trader I need to see what other people's expectations are and how the markets are moving in the lead up to scheduled events, so I can plan my trading

As a trader I need to be quickly informed of any major breaking news as it unfolds, so that I do not miss any opportunities

As a trader I need to follow what's happening during both scheduled and spontaneous events, so that I can make informed decisions in a fast-moving market

As a trader I need to access expert analysis on markets and levels to watch, so I can get some ideas on what to trade

As a trader I need to access asset-class specific news such as RNSs, earnings reports etc, so I have an informed view of that asset class

NEWS & EVENTS - WORKSHOPS

Having agreed on the problems to be solved, I then held workshops with stakeholders to further analyse the problem space. We first generated and grouped low-level user needs before sketching out initial solutions.

IG - TRADING PLATFORM

NEWS & EVENTS - SKETCHES & WIREFRAMES

I starting designing by sketching multiple rough solutions, and iterating on them as I progressed and got feedback from stakeholders and critique from the UX team. I also consulted with both developers and Reuters contacts to understand the constraints of the middleware and the available data.

As I narrowed down potential solutions and iterated upon them, the designs evolved to wireframes of increasing fidelity and where relevant, prototypes.

IG - TRADING PLATFORM
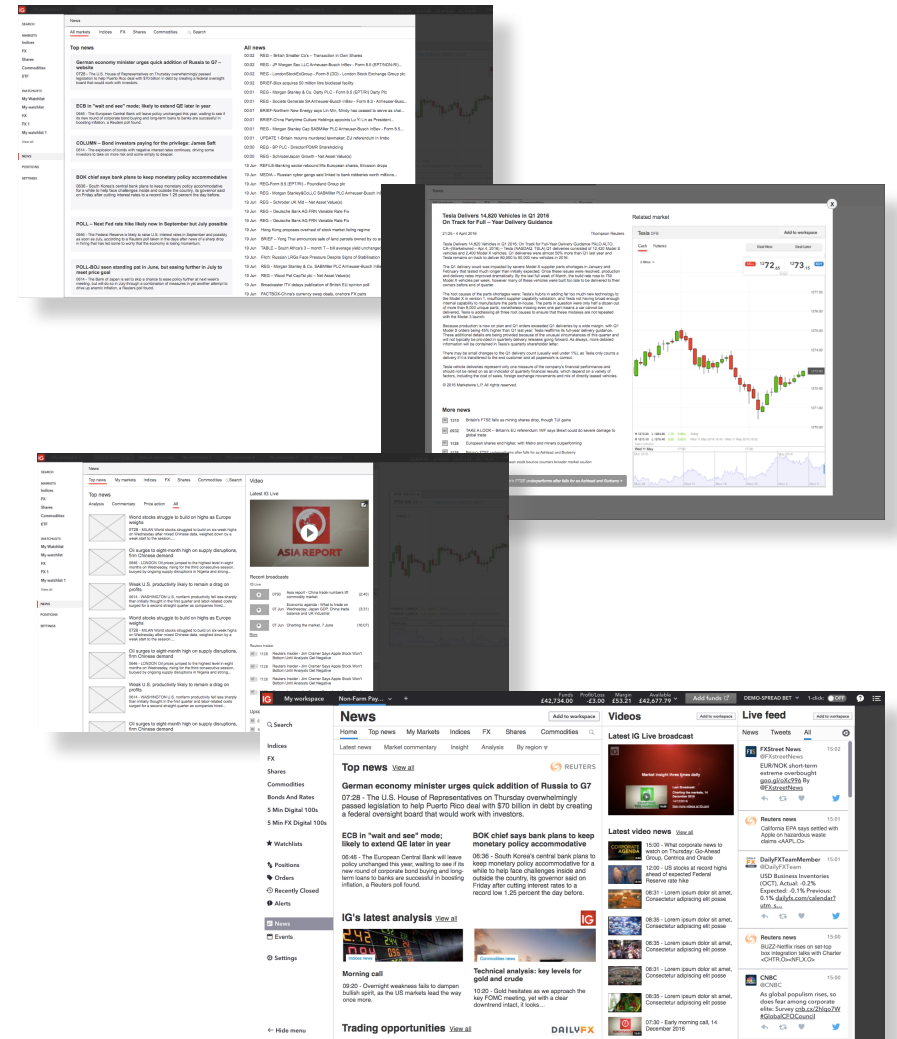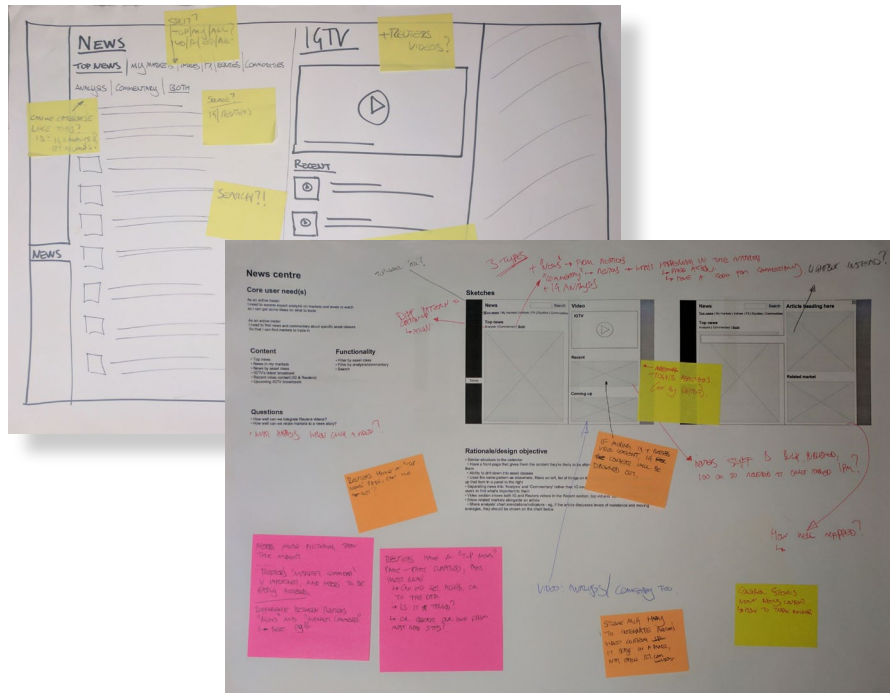
NEWS & EVENTS - DESIGN SPECIFICATION

Once the overall news vision was signed off by stakeholders, the relevant stories where put into the backlog. As these were moved into sprints, I specced out the relevant solution in detail for the developers.

NEWS & EVENTS - DEVELOPMENT SUPPORT

I worked alongside the developers while the work was in sprint, helping resolve any queries and issues that came up and ensuring the results were as intended.

Once the work went live, we used customer feedback to help prioritise and inform further stories. Although much of the proposed vision is still to be implemented, what has ben released has been very well received.

LLOYDS BANKING GROUP - PERSONAS

ABOUT THE PROJECT

Lloyds Banking Group approached us to develop a set of personas for the Lloyds TSB, Halifax and BOS banks. These personas are to be used to inform design decisions across a range of digital projects by the relevant UX, design, marketing, sales and product teams.

One of the unusual challenges of this project was that we had to develop a set of personas that were not specific to a particular project or product, or even a specific brand. They needed to be able to be used by anyone working on any project, for any product, in any of the three companies.

Another issue was that the group has over 30 million customers in the UK, so it was a challenge to work out exactly who were the right customers to speak to for our project.

Fortunately, I had access to a huge amount of information, and a budget which allowed us to carry out the research we needed to create a world-class set of personas.

The final deliverables have recently been sent to the client who is delighted with them and I'm looking forward to hearing how they perform.

LLOYDS BANKING GROUP - PERSONAS

SECONDARY RESEARCH

As a large corporation, LBG had a huge amount of existing information available to help us to get an initial understanding of their customers. We gathered data from various departments such as marketing, product, strategy and so on. We then analysed this to get an understanding of their customers and how they differed between the three brands.

We also collected our own secondary data, for example analysing Twitter sentiment and conversation topics for each brand.
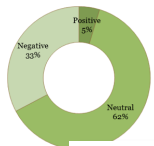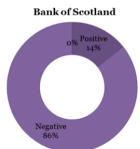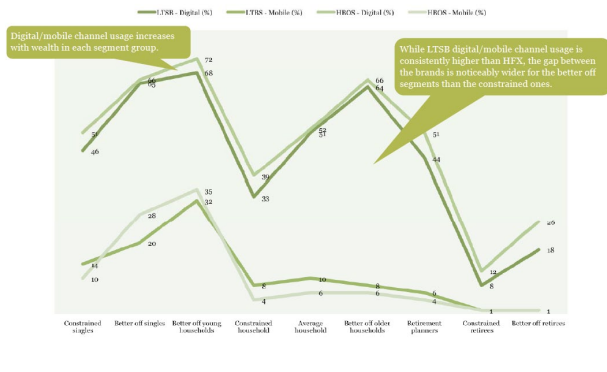
DATA ANALYSIS

I created a spreadsheet which amalgamated the quantitative values from various data sources against each of LBG's existing marketing segments. This served as an initial segmentation hypothesis, which helped drive the recruitment of our research participants.

The primary research would then test these hypotheses and if the data is validated, it would allow us to enrich the personas with this quantitative data on top of our qualitative research.

Social media sentiment

Channel usage

Data analysis spreadsheet

LLOYDS BANKING GROUP - PERSONAS

RECRUITMENT SPECIFICATION & DISCUSSION GUIDE

Although the initial segments gave us data on the user groups we needed to recruit, it did not help us work out how many of each we required, because they could be prioritised in several ways — revenue gained, online banking usage, volume of people and so on.

I created a tool to allow LBG to apply a weighting to the different customer attributes which would then tell us how many of our research participants should be from each segment.

I also spoke to staff from the departments that would use the personas in order to create a well-informed discussion guide that would help gather the information they were looking for.

PRIMARY RESEARCH - INTERVIEWS AND DIARY STUDIES

Although we planned, observed and analysed all of the primary research, due to client politics, we were unfortunately unable to actually facilitate the sessions ourselves, instead they were conducted by another agency.

The research consisted of phone interviews, face-to-face depth interviews and online diary studies.
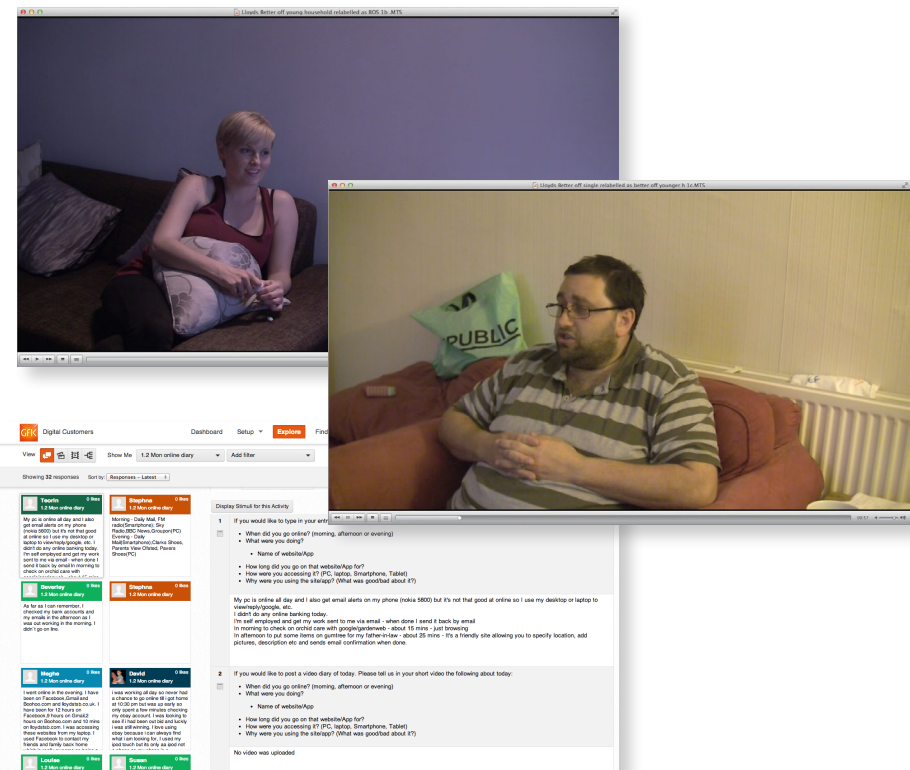
LLOYDS BANKING GROUP - PERSONAS

PRIMARY RESEARCH COMPILATION

Following the primary research, I had hours of audio and video to review, along with accompanying notes and the full diary study logs.

This allowed me to thoroughly familiarise myself with each participant and create a spreadsheet summarising each participant against an initial set of attributes.

PRIMARY RESEARCH ANALYSIS

The next step was to identify patterns between the research participants. I mapped out each participant on linear scales against various behavioural, attitudinal and demographic attributes. I then identified patterns between the participants — i.e. where person A appears at the same point as person B on multiple attribute scales. I then identified groups of similar participants, where there were multiple attributes matches connecting them.
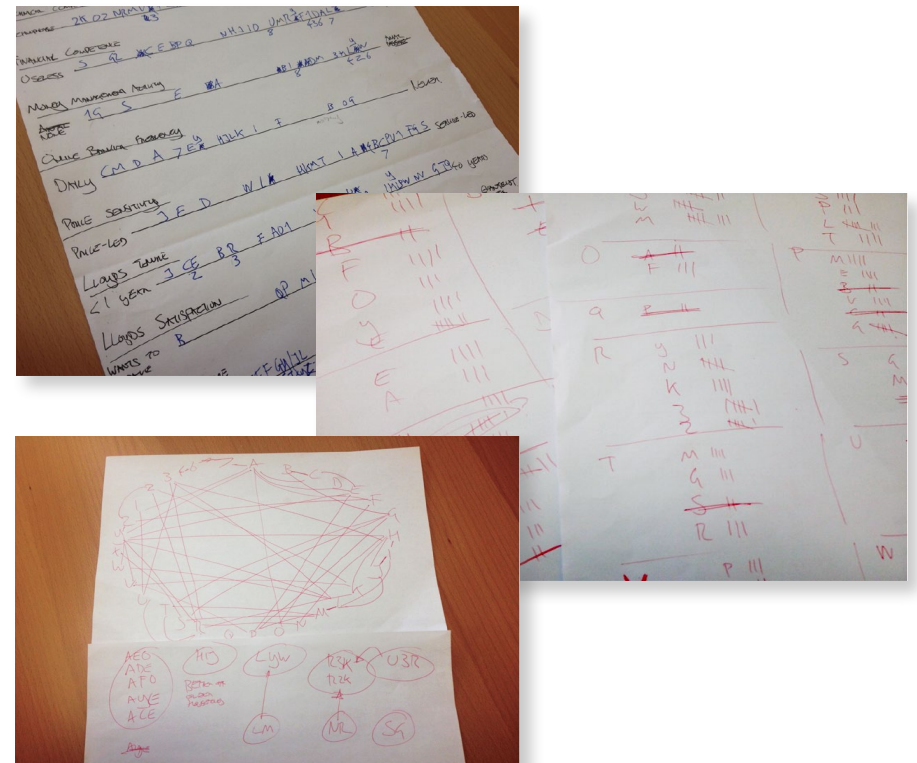
SEGMENTATION

Having identified groups of participants with various attributes in common, I then looked at what made these people similar, which formed the basis of our segmentation. The values of the shared attributes then start to form the core of our personas.

These patterns were then compared to the original marketing segments to see if they validated the data, which they did.

ATTRIBUTE DEFINITION

We held a workshop with several LBG stakeholders to identify and prioritise the attributes we wanted to feature in our persona documents.

My participant summary spreadsheet was then updated, highlighting the segments identified and also adding the new attributes and retrieving their values from the research documentation.

"First-time buyer"
A,D,E,F,Q - (All Better off singles)
Looking at buying first home/settling down
Early 30s
Tech-savvy – iPhones, apps, games, social media
Good money-management skills
Financially comfortable
Not been with Lloyds that long
No kids
Have ~2 LBG products - AVA/CA + CC/SA
Products elsewhere - Mostly dormant/unused current accounts or for less serviced products like mortgage/life or rate-based stuff like mortgage/cc

"Climbing the ladder"
H,I,J (All Better off older households)
Looking to buy bigger home, progress their career
Reasonably financially competent
Use OB fairly often
Pretty happy with Lloyds
Late 40s
Couple young kids
Average income
~3 LBG products - AVA/CA + CC, SA/ISA
Products elsewhere - Mortgage, insurance – shop around when deal ends

"Retirement planners"
(Mostly Retirement planners)
Looking to retire
Not very technically competent
Good with finances

Checks OB couple times a week
Been with LBG almost 30 years
Happy with LBG
Sometimes go in-store
60ish
Kids have left home
~3 LBG products – CA, Saver, ISA/CC
Products elsewhere - Mortgage, savings, cc

"Getting by"
S,G (Both Average households)
Reasonably good tech competence
Low financial competence
Low/no money management
Service led, not price led
Been with LBG for 30+ years
Pretty happy with LBG
50ish
Married, no kids
Holds 4/5 LBG products – AVA/CA, CC, loan, mortgage

"Looking after the family"
L,M
Been with Lloyds ~30 years
Not that happy with Lloyds
Late 40s
Grown up kids
Low tech
Highly financial competent
Strong money management
Regular online banking
Balanced price/service led

PROTO-PERSONAS

Once I had identified our segments and complied the data for each research participant in those groups, I then needed to consolidate the data from multiple participants into a single entity to form the core dataset for each persona.

Again, this was done in a spreadsheet so I could quickly make changes as the work was iterated following reviews and discussions with the client.

PERSONA WIREFRAMES

Along with the data to populate the personas, I produced the wireframe designs for the persona documents themselves. These started out as basic block-level layouts to discuss and agree the content hierarchy in the various different document formats we looked to product. I then iterated through several versions of increasingly-detailed low-fidelity wireframes which were used to brief the visual designers for production.

LLOYDS BANKING GROUP - PERSONAS

FINAL DESIGNS

The final visual designs were produced by a colleague who was briefed and overseen by myself. I was also responsible for most of the image sourcing as getting the right photograph was key to bringing the personas to life.

We produced the personas in various formats for maximum penetration and engagement; This included A1 posters and thousands of paper cups for the LBG offices.

PERSONA PRIORITISATION MATRIX & USAGE GUIDE

One of the complications on this project was that the client wanted a single set of personas which could be used on any LBG digital project — across three brands and numerous products. As such, I created a prioritisation matrix for each brand, showing which were the primary personas for each product for that specific brand.

As the personas were to be used in various departments throughout LBG, not all of their users would have used personas before, so I created a usage guide that explained what they were and how to use them.

RIAS - GENERAL INSURANCE QUOTE AND APPLY

ABOUT THE PROJECT

RIAS, a general insurer operating in the over-50s sector, became aware through an industry-wide benchmarking report, that their conversion rates were well below industry averages for both their home and motor quote-and-apply journeys.

They asked us to look into what issues could be causing this and how we could go about designing a simplified user journey which would lead to more conversions.

As Lead UX, I was fully responsible for the research, design, testing and analysis, along with presenting the work to RIAS' board.

Designing for an older audience presented an enjoyable challenge with an increased focus on simplicity and accessibility.

The system is currently under development and although the work has not yet gone live, it has been very well received in testing and by the client.

RIAS - GENERAL INSURANCE QUOTE AND APPLY

HEURISTIC EVALUATION

I started off by reviewing RIAS' current system to identify what existing issues could be causing the substandard conversation rates. This also allowed me to gain a thorough understanding of the system.

LITERATURE REVIEW

I asked RIAS to supply me with existing information about their brand, products and customers. They provided personas, strategy documents, brand guidelines, tone of voice documents, quote analytics and more — allowing me to make better informed designs.

RIAS - GENERAL INSURANCE QUOTE AND APPLY

STAKEHOLDER WORKSHOP

I gathered various project stakeholders from different departments to hold an initial workshop to gather insight and refine the project requirements. In the workshop we collaboratively agreed and prioritised project goals and success criteria, and discussed existing issues and pain points.

I also used this opportunity to identify the purpose and owner of every question in the existing quote process. This allowed me to challenge the necessity and value of each question in order to streamline the process.
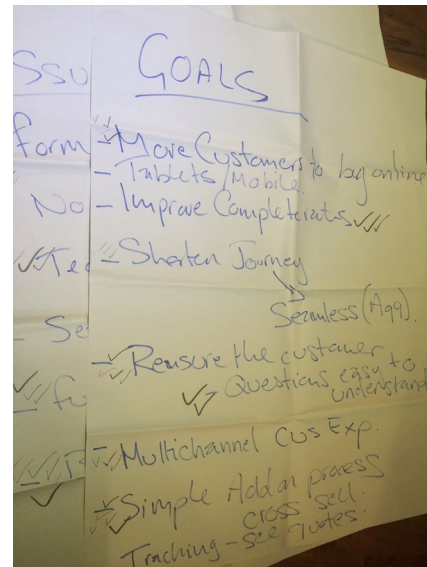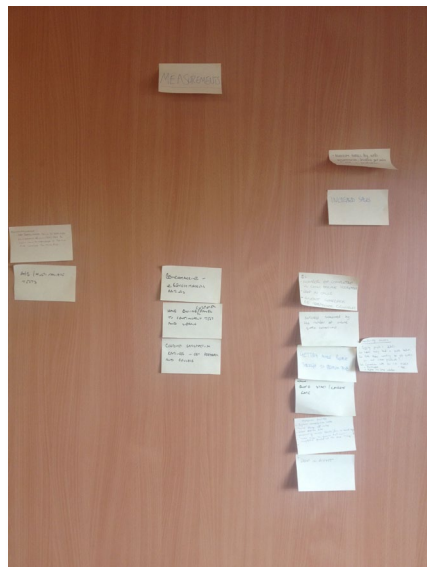
COMPETITOR ANALYSIS

As there were many competitors with better-performing quote processes, a competitor review was a highly efficient way of evaluating alternative concepts.

This helped provide inspiration and points of discussion for the stakeholder team, with everything from user journeys and interface design to product structure up for debate.

RIAS - GENERAL INSURANCE QUOTE AND APPLY
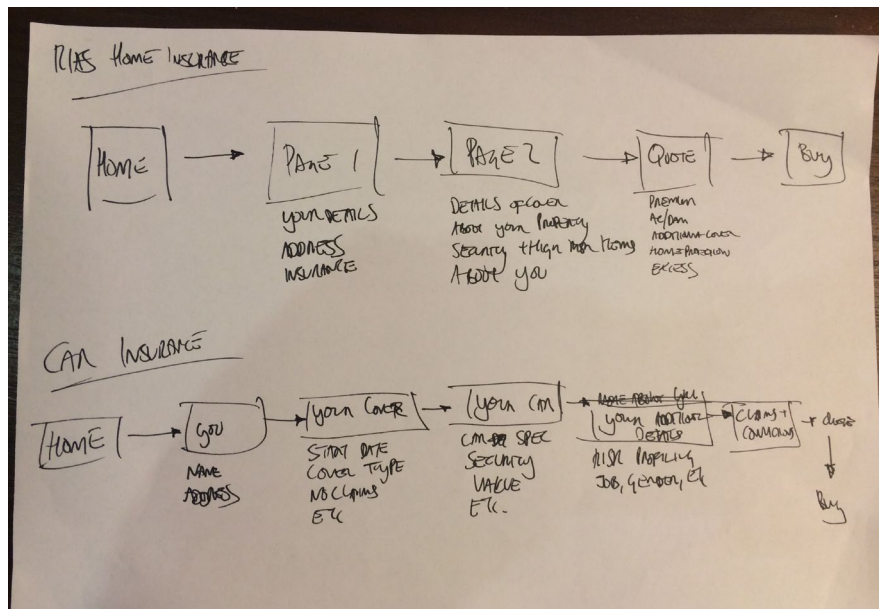
USER JOURNEYS & CONTENT INVENTORY

After a number of high-level sketches to determine the approximate user flow, I somewhat surprisingly found Excel to be the best tool to flesh out the details of both the journeys and the content/question-set.

Working in a spreadsheet allowed me to quickly specify the structure of the process —— in terms of the pages and sections the questions were spit up into.

This also allowed me to define the question text, field types, default values, placeholders, validation rules, help text, and so on, and then quickly iterate and progress the core form design without fiddling with layout.
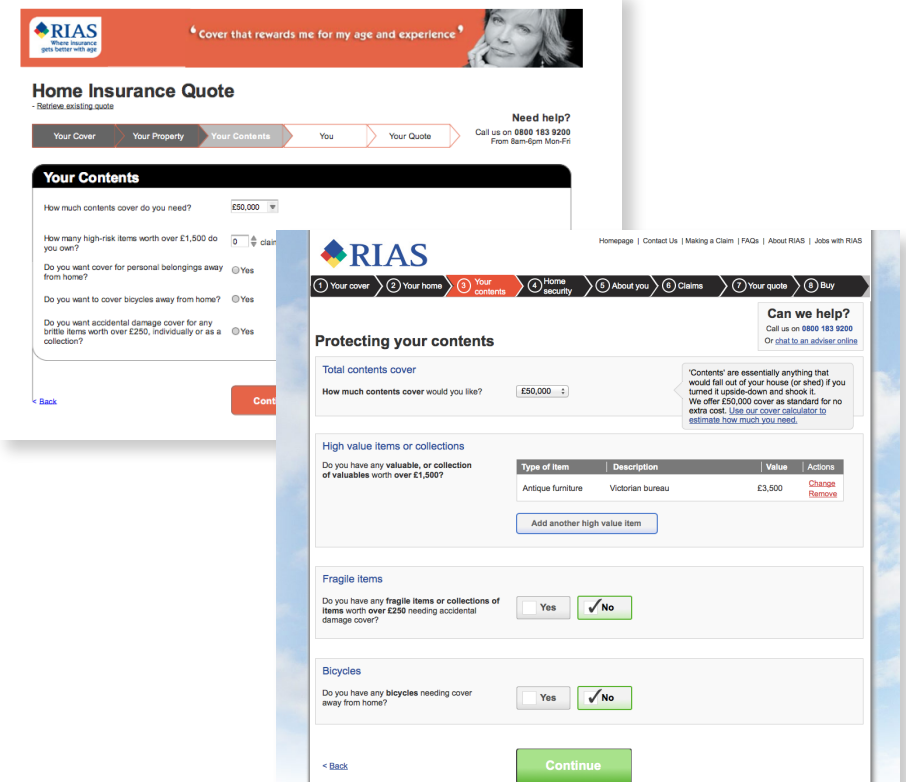
RIAS - GENERAL INSURANCE QUOTE AND APPLY

SKETCHES

I produced a range of quick, throwaway sketches, iterating through ideas to develop layout concepts and a form framework. I also started to explore the interactions required for the dynamic parts of the quotation system.
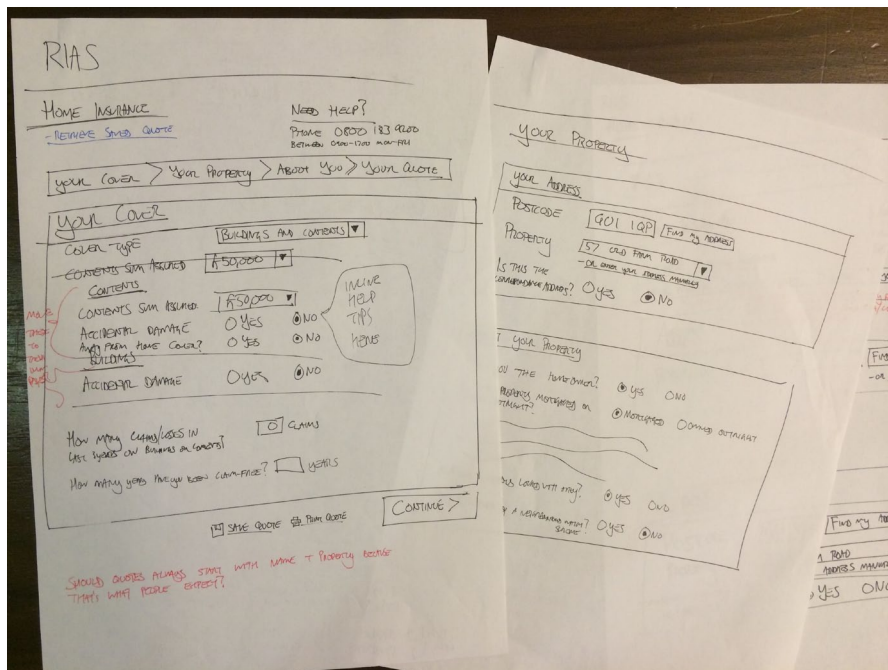
PROTOTYPES & MICROCOPY

Having already designed the content and the structure of the forms, it was quite straight-forward to create a medium-fidelity interactive prototype with Axure. I also worked on refining the microcopy to increase usability and to follow a consistent tone of voice. The prototype was then refined over several iterations following workshops and rounds of usability testing.

RIAS - GENERAL INSURANCE QUOTE AND APPLY

## RECRUITMENT BRIEF & DISCUSSION GUIDE

Designing for an audience of 50–80 year old online buyers created a challenge to find suitable research participants — especially as RIAS' customers are not typically based in London. As such I created a recruitment brief and found a recruitment agency who fulfilled it.

I also put together a discussion guide to provide scenarios for the usability tests and some questions to help better understand our users.
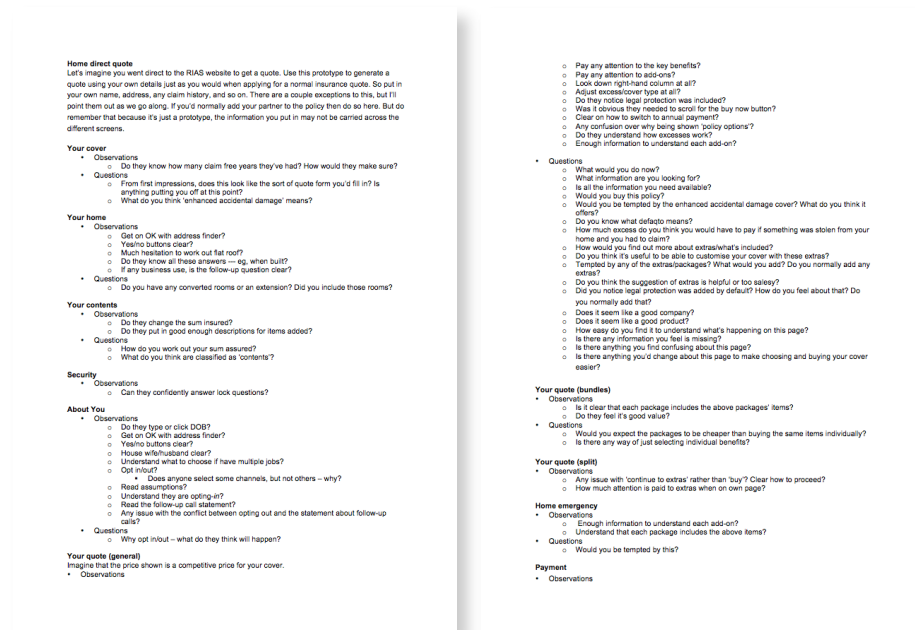
USABILITY TESTING

I planned, facilitated and analysed three rounds of lab-based usability testing, using eye-tracking systems. This was observed by a group of stakeholders and colleagues in another room with whom I agreed quick changes to the prototype between test sessions.

RIAS - GENERAL INSURANCE QUOTE AND APPLY
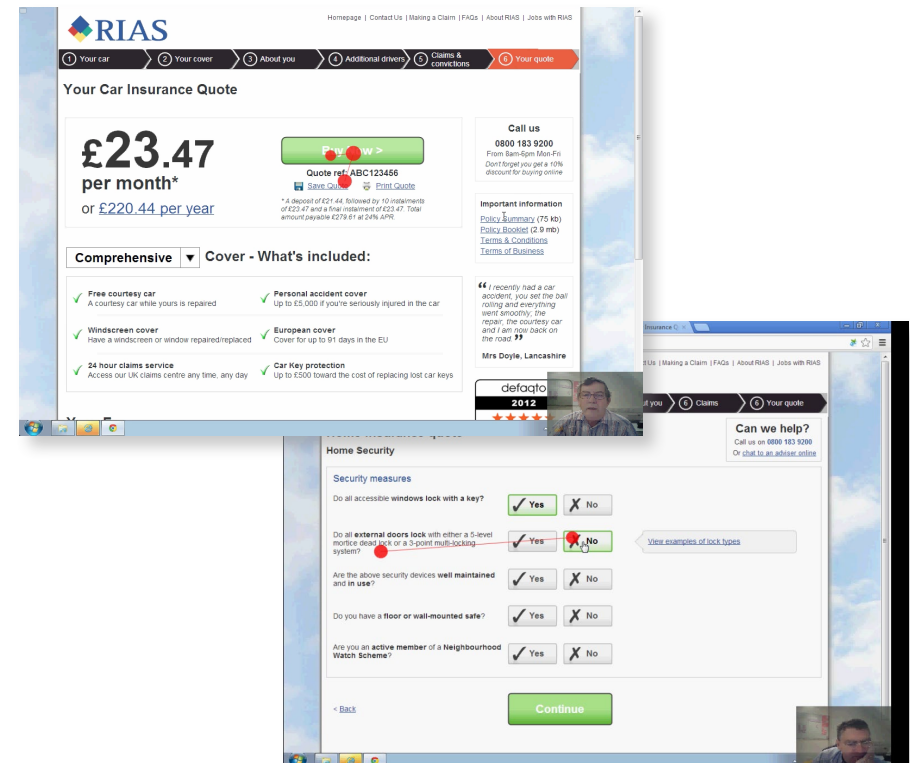
RECOMMENDATIONS REPORTS

In an effort to concentrate on outcomes rather than outputs — and to speed up the rate at which we iterated the prototype — I created a simple report with categorised lists of observations and recommended actions. As the client had observed the testing sessions themselves, more comprehensive documentation was not required. The recommendations were then discussed with the client before being implemented and re-tested.

A/B TESTING PLAN

With the prototype finalised, I provided a selection of A/B test variants to evaluate when going live. These included strategic product structure options that I devised during design, but required quantitative testing, rather than the qualitative testing we had conducted to date.