UX Case Studies

Vas Frolik Design

Coffee Go App

- I started working with Coffee Go in the spring of 2017, the only asset owned by the company at the time was the conceptual idea and a little bit of market research, with no Product Design work or User Research done so far.

1ˢᵗ step – User Research

- The first step of the process was a very thorough User Research, firstly I started by interviewing the founder, coffee shop owners and industry professionals to help understand and draft a base user demographic, those users to which the app will be aimed at.

Prospective User Base (Persona)

• Professionals

• Adults (25-60 years of age)

• Working in busy London hubs with an abundancy of independent coffee shops (City of London, Canary Wharf, Shoreditch, Soho, Waterloo, London Bridge)

• Coffee-drinkers

• Buying at least 1x coffee per week outside

• Somewhat interested in high quality coffee.

User Interviews

- The second step of User Research was to interview prospective users from the user base defined in the first step.

- We have interviewed approx. 20 people, with an interview structure explained in the next slide

- From the findings we grouped the responses into 4 group personas representing the average user for each group

Interview Structure

- OVERARCHING QUESTION

- What is your usual morning coffee routine and what are the main frustrations you encounter during the process?

- FOLLOW-UP QUESTIONS

- How often do you buy take away coffee?

- What kinds of shops do you favour?

- Tell me about the last time you had a take away coffee? What happened? What did you order? How much time did you queue?

- Tell me of a time when something unusual happened on your morning coffee run?

- Tell me of a time that you had to wait for long in queue?

User Interviews Findings

- The majority of users order take away coffee at least once a day

- The majority of users order coffee during peak hours (8-10am, 12-2pm)

- The majority of users queue for an approx. time of 15-20 minutes

- Users tend to prefer large chains to small independents for time efficiency

- 90% of users value quality more than speed

- Some majority of users shop or are interested in independent coffee shops

- Users tend to use two different apps to find a coffee shop around them or their destination (Best Coffee App, Google and a Map application such as Google Maps or Citimapper)

- Users tend to get their coffee fix close to home or close to their workplace.

- The majority of users tend to travel between 30-60 minutes in order to get to work from home.

- Users usually don't have enough time to wait in queue, resulting in them being late for work or having to organize themselves to leave the house earlier in order to get a coffee.

User interviews – Coffee Shops workers

- In addition to prospective users, we decided to interview coffee shop owners and workers in order to gain a deeper understanding of their work and to evaluate the possibility of creating a workflow application for shops, similar to what Deliveroo and Uber Eats already have.

- We have gathered a group of baristas, café managers and owners and interviewed, interview structure is outlined in the next slide

- From the findings we have grouped in to 3 different groups: novice baristas, experienced baristas and managers/supervisors.

User Interviews (Coffee Shop) findings

- The majority of baristas complain about being unable to cope with peak hours

- During those hours, 80% of shops have to employ an extra person just to organize workflow and take orders and payments

- Payments and orders account for 40% of the time of making coffee (without considering queue)

- Long queues have caused many customers to leave the shop when waiting too long, causing frustration in users and loss of revenue for shops

2nd Step – Market Research

- Competitor Analysis – I researched any competitors or similar apps on the market, the only main direct competitors were Ordoo in UK and Beat the Queue in Australia. Also, indirect competitors include Starbucks, Costa, Nero, Black Sheep Coffee, which are chains but have their own pre-ordering app. We discovered and studied past apps that had a similar function, we found DripApp, which was an app that was online 2 years ago and failed

- Coffee Market Analysis – We researched market data such as market share between Large 'Fast Coffee' chains and small-medium independents, number of independents coffee shops in London, sales amount of coffee in UK and future projections.

- Price of an average coffee cup – through requests to acquaintances in coffee shops we defined the average price of a cup of coffee and its ingredients.

- Coffee export statistics – we researched statistics regarding the amount of coffee exports.

Competitor Analysis

- Ordoo – Mainly based on food pre-ordering and pick up, app does not work seamlessly and does not have many shops onboard

- Beat the Queue - the best similar app on the market at the moment, unavailable in the UK, user flow and functionality user-friendly, user is still requested to load money in the app in order to be able to order

- Starbucks – the largest app on the market, many case studies have proved that users are still waiting in queue at the counter even when pre-ordering, app requests the user to load money in the app in order to be able to order.

- DripApp – Most similar version to conceptual idea, app focused on creating a vision of coffee as a luxury item and also requested the user to load money in the app in order to be able to order. App failed when under-funding caused a server to crash and lock all users money in the cloud for an extended period of time.

Overall Research Findings

Pain Points

- Queuing in busy areas at peak times for coffee are approx. 20-25 minutes

- Large coffee chains, offering lower quality products are controlling 60% of the market because of their ability to offer a faster service whilst sacrificing quality.

- Customers prefer independents but are attracted by large 'fast coffee' chains for their efficiency.

- Many independent shops have a low profile branding and a lower advertising budget compared to larger chains, making them harder to discover

- In existing coffee ordering apps, very often the mobile ordering customer still wait in queue instead of picking up their coffee and leaving.

- Users very often have to use a maps application or go by memory in order to find a near coffee shop

- Independents sometimes struggle to keep ahead of the competition

Solutions

- With CG's ordering function users will be available to order, pay and schedule their pick up.

- With the ability to discover independent coffee shops, get their coffee quicker by ordering ahead and with our 'Workflow' App for Shops, users will be able to get high quality products at a faster speed.

- With the app's Discover section, users will be able to find hidden/hipster shops seamlessly.

- With our 'Workflow' App customers won't wait when pre-ordering as the app will schedule all orders in order of time available and set by a coffee shop based on their availability.

- With a 'Google Maps API' Integration, users will be able to have their itinerary as follows integrated to the app: starting point > coffee shop > destination.

- With the app the shops' traffic will increase significantly.

3rd Step - Brainstorming

- With all this data in hand I brainstormed together with the founder & CEO initially possible solutions to the pain points discovered during research.

- I created a user flow explaining the basic functionality of the app

- I created user stories that would be used as direction in the next steps to be taken and created a backlog

- The solutions and flow have been then visualized in sketches and submitted to the founder for approval.

User Flow

The initial User Flow – as seen above in Wireframes - was as follows:

1. User logs in or registers to the app
2. User chooses to order from menu
3. User inputs destination – user is shown a map area around his location, showing nearby coffee shops
4. User clicks on coffee shops list and chooses preferred coffee shops
5. User chooses the coffee he wishes to order
6. User personalizes his choice
7. User pays via ApplePay or SamsungPay
8. User chooses pick up time
9. User picks up coffee at counter

4th Step – Scenarios

- After the main functionalities were outlined, I elaborated a few different scenarios of users interacting with the app.

- The data used was the same as the initial research

- I have created a scenario for each group persona

- An example is outlined in the next slide

Scenario 1 – Central London worker living in Outer London or farther

OVERVIEW

Caitlin Brown, 51, IT Support Analyst, married with children, working in King's Cross and living in Surrey, technology proficient, familiar with pre-ordering apps.

SCENARIO

Caitlin is on her way to work from her home in Surrey, she has to travel through 3-4 trains before arriving at work and she forgot to make her coffee this morning and hopes to get one as soon as she gets close to work.

She planned to grab a coffee at Waterloo station as she has about 15 minutes of spare time before the next train. Unfortunately, it is rush hour and the train to Waterloo has stopped. She decides to order her coffee on her phone from Coffee Go so she won't have to queue when she gets to King's Cross, she sets the time to pick up in 30 minutes.

Unfortunately the train moves and then stops again for about 8 times, resulting in a delay and making her arrive in Waterloo 45 minutes after ordering the coffee. Caitlin picks up her coffee from the shop and throws it away as it has been sitting there for long.

PAIN POINTS

- Current pre-order apps do not give users freedom and choice to change their pick-up time.

- Coffee gets cold very quickly making users frustrated when not ready in time or when they are late.

- Coffee shops cannot communicate with Users when internet connection is not available.

SOLUTIONS

- With Coffee Go, users will be free to select and change their pick up time at any time.

- With Workflow. By Coffee Go, coffees will be ready at the same time the user gets to the shop

- With a notification-feedback system between the user app and the coffee shop app any order will be put on hold when user is delayed.

Scenario findings

- The main finding from the scenario was that circumstances can change quickly during an order and users must have the ability to communicate to coffee shops and be able to post-pone or change the order.

- The solution to this pain point was to include a notification-feedback system, where a Barista would send a notification to the user via the Workflow. App right before he starts making the coffee, the notification will reveal the expected time of pick up time (usually 3 minutes after) and the user is free to accept the time or snooze it for 5 or 10 minutes. If the user does not reply in 1 minute, probably because of missing internet connection, the order automatically snoozes 5 minutes ahead.

5th Step – Wireframes and Low Fidelity Prototype

- With the data first researched and the findings from the scenarios I have transferred the sketches from paper form to digital and created a clickable, interactive prototype to facilitate user testing.
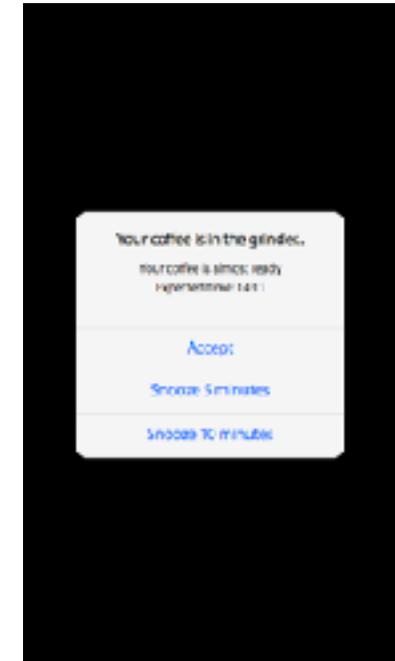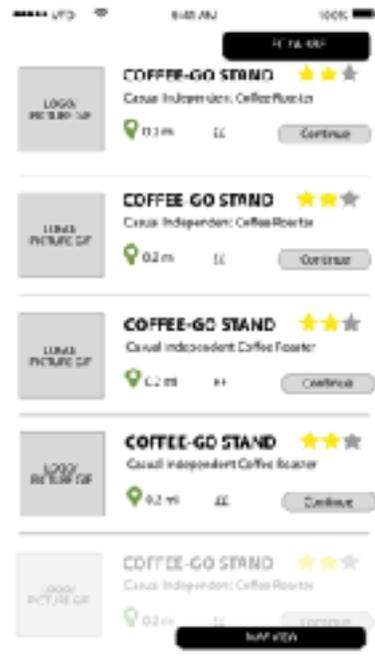
6th Step – First User Testing

- The prototype gave me the ability to test it on users

- I have called in some of the prospective users I have interviewed and divided them in the 4 different group personas drafted.

- User Testing Plan is outlined in the next slide.

User Testing – Plan

- Test goals

The goal of this user test is to answer the questions:

- Can experienced users of coffee apps use Coffee Go to pre-order their coffee?

- Can non-experienced users of coffee apps use Coffee Go to pre-order their coffee?

- What problems do users encounter when trying to use Coffee Go to pre-order coffee?

- Specific recruiting and diversity criteria

The principal audience for this test will be 'non-experienced users' included in the 4 persona groups drafted.

In detail, a user:

- Has never used a coffee ordering app before

- Has used a coffee ordering app before

Within this population, will be interested in certain diversity criteria, in order to gain insight into how different types of users will experience the site. We will seek to recruit participants who differ along two dimensions:

- Coffee Preferences

Prefer independents over shops

Value quality

Value speed

- Frequency of coffee orders

1-5 coffees per week

5 coffees per week or more

User Testing – Task Instructions and Success Criteria

- TASK 1

Order a Cappuccino from a Central London coffee shop and request pick up time around lunchtime.

Success criteria: Appropriate coffee ordered

- TASK 2

Order a Cold Brew from a shop located near EC1A 7EB and request pick up time 20 minutes from now.

Success criteria: Appropriate coffee ordered in EC1A, only 4x shops around the area, 2x of them available before 20 mins.

- TASK 3

Order a Latte, decaf and with almond milk from the top rated shop around your location and set pick up time for 13:30.

Success criteria: Appropriate coffee ordered from London Coffee Shop.

Post Test Questionnaire and Debriefing

- A post-test questionnaire has been included at the end of the testing, requesting the user to rate from 1 to 5 certain statements, all related to understanding of the app and likelihood of future usage.

- A post-test interview also followed, asking the user to comment on preferences, changes he wishes he could make to the app, understanding of the app and use cases.

Post-Test findings

Pain Points 🙁

- On interacting with the app, users get stuck at first map/shop split screen as they look for nearby shops right away.

- Users found it frustrating to set pick up time by inputting the exact time.

- Users find the transition between screens when selecting preferences frustrating and spent more time than usual on the task.

Solutions 🙂

- Instead of a split screen, map functionality and nearby shops functionality will be divided in two screens, with the shops being the new main screen.

- Users can now choose between different time option and save time

- Users can now choose their preferences without having to tap through different screens

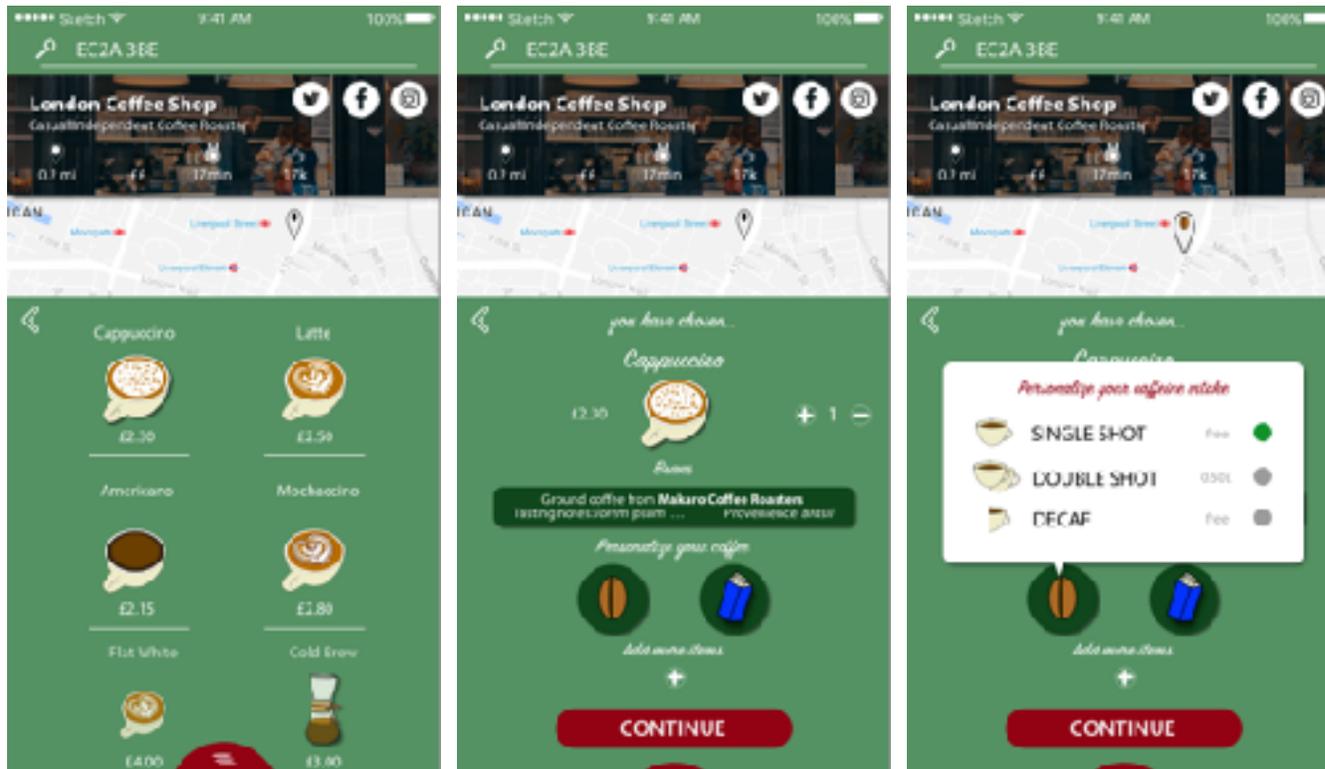Example screens are outlined in the next slide:
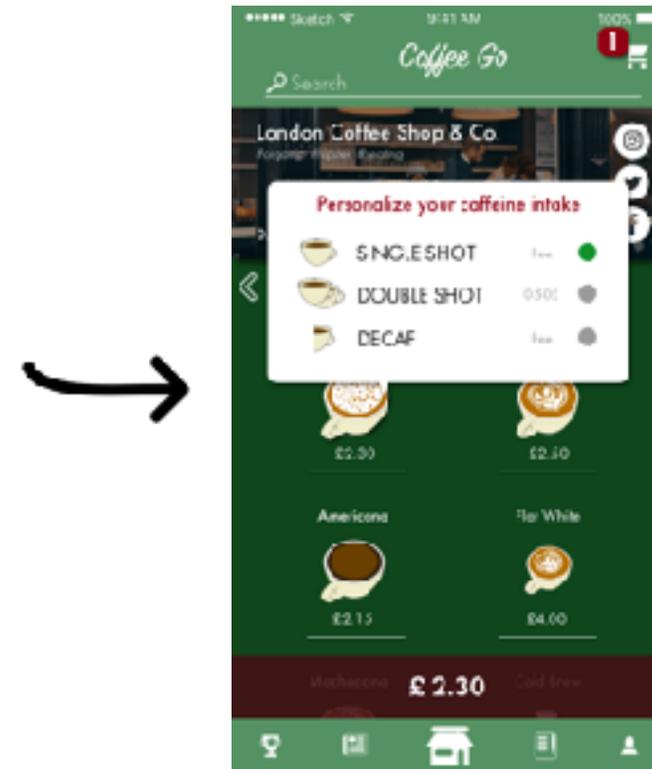
Post-Test Findings
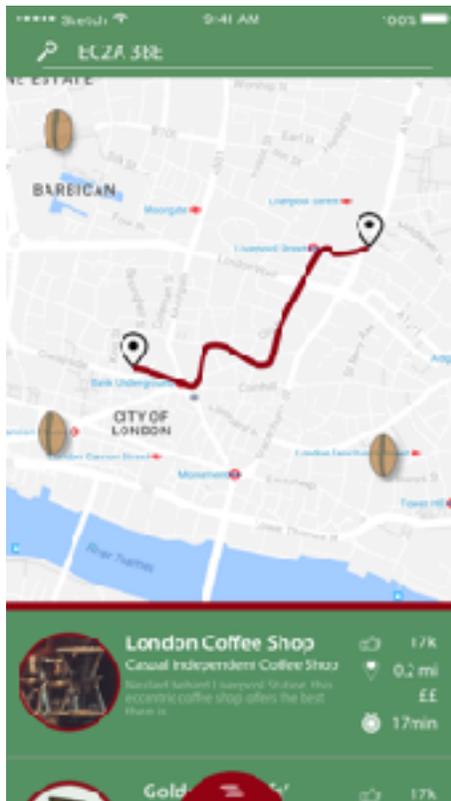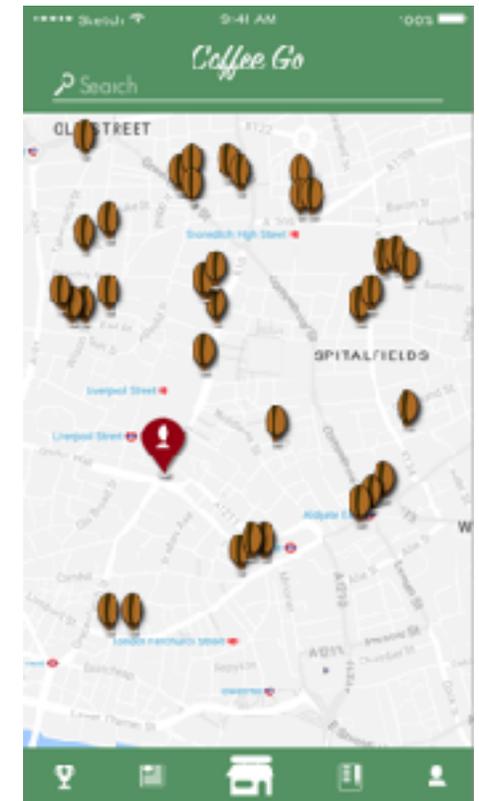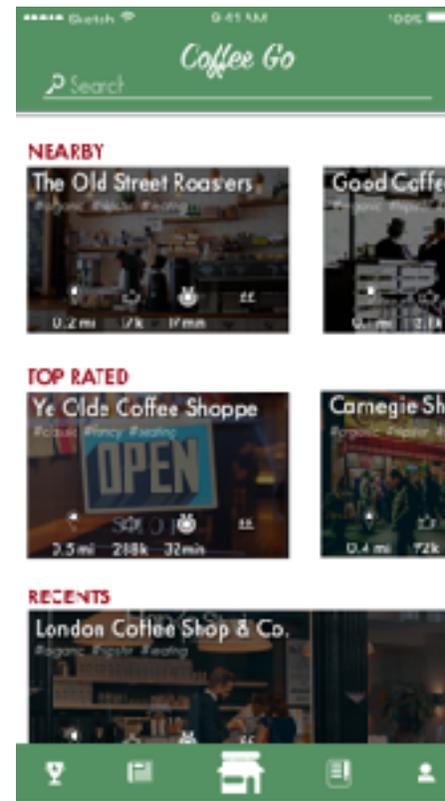
Before
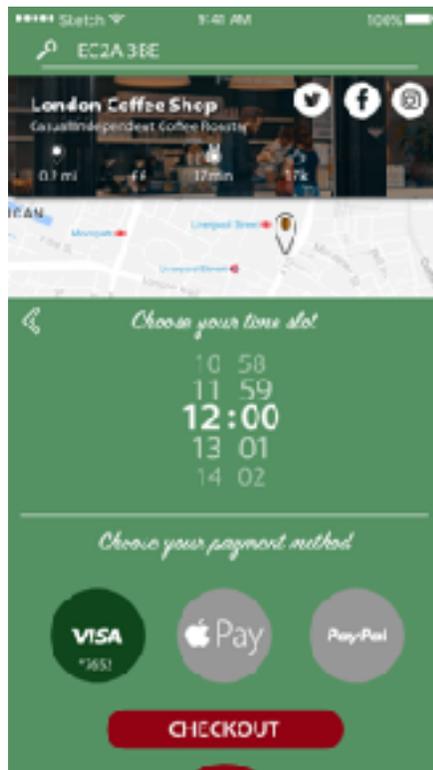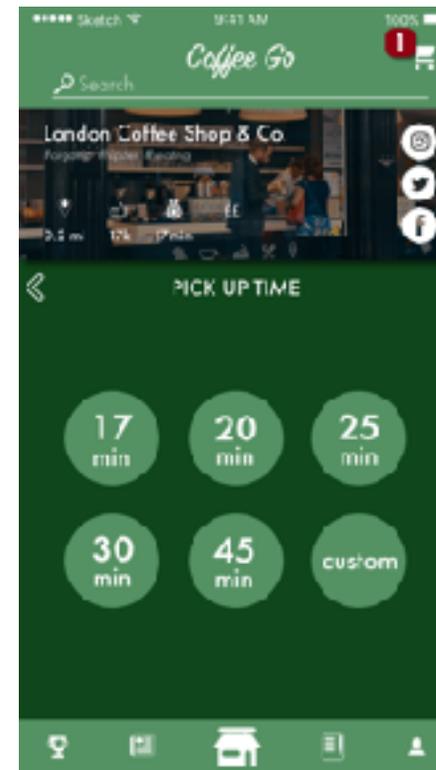
After

Post-Test Findings

Before

After

Post-Test Findings

Before

After

Overview of Research and Testing

- By going through rounds of user and market research I have defined the prospective user base and categorized in persona groups.

- From the findings in the initial research I have discovered pain points and designed solutions in line with company's business needs

- From the findings in the user testing, I have discovered pain points with the first app design and implemented solutions to erase UX debts.