

Usability Test Report

User Experience Redesign Project



Usability Testing for GumTree And Redesign Documentation

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1. Introduction and Background

The business is more often driven by the factor like ease of understanding the product than the product result. The factor that almost 1/3 of the customer's loyalty depends upon the usability precipitation which was proved after an investigation of the correlation between net promoter score and scale of usability (Sauro, 2010). "Over time," he states, "if people think your product is usable then they are more likely to use it, more likely to recommend it and you are more likely to sell it." (Sauro, 2010). In a different research, Kuan, Huei Huang "found a relationship between system quality and conversions, (Kuan, Huei, HICSS '05). i.e., three dimensions of usability that 'explain over 70% of the variance of intentions for planned purchase as well as a future purchase.' Thus, it is highly necessary for e-commerce companies to continuously evaluate their products with respect to good usability, in particular, to remain competitive." (Speicher, 2019)

1.1. Recent Developments and Trends

This research will help the product cope with the market standards which is pretty transparent. When it comes to simplicity, the mode of communication for this era has completely changed. The Mobile Commerce Daily proposed that the user's audience of 45% dislike their application usability and 77% of them tend to uninstall the application within the first 3 days of installation. The usability testing will play a vital role to understand the problems with real-life audiences those who do not speak the language of design but understand well. (Swaid and Suid, 2018)

Trends are just the new standards of the market been accepted but a larger mass of people who are part of faster-evolving society. The design trends are universal for the mass, the modification and simplification makes it easier to understand any technological advancement. M-commerce is driven by Millennials, Mom and Multicultural. 61% of them download the retail application that is new in markets with deals or offers. So before the application hits the threshold of being aged with the same interface design. (Mobile Commerce Trends - JMango360, 2020)

The presentation of products and advertisements needs to be categorized with structured action elements with the ongoing market trends and design innovations. Gumtree has the simplest HTA for the users in terms of usability and user experience. Major issues are with navigation, action elements and the presentation of user interface that needs a redesign. So with the proper remodelling and structuration of the categories, the application can be more user-friendly.

The "Hiser Element™ methodology in *The Hiser Element Toolkit* uses a simple matrix: you capture issues during research and analysis." This methodology states that the UX goals need the ease of use with minimal user clicks to achieve an end result. The design perspective matters a lot to make the user stick to the application and service using for a far seen longevity.

The evaluation needs to be done with pace because the market is evolving day by day and to mark the product with the industry standards are achievable aims. The factor that is concerning is social media is the fastest-growing application in the industry. And the online application needs an audience. And social media has all its audience, a small spark will be enough to communicate with each of the users. The finest example that fits in will be Facebook

Marketplace (competitor) has enough of the data and audience to which it can address any deal with any price or of free. (Gevers, n.d.)

1.2. The Existing User Interface

The walkthrough of a task and illustration for the flow of interaction:

The task was just to take a tour through the application (GumTree). The screenshot will depict Screen Flow and the action items with description.

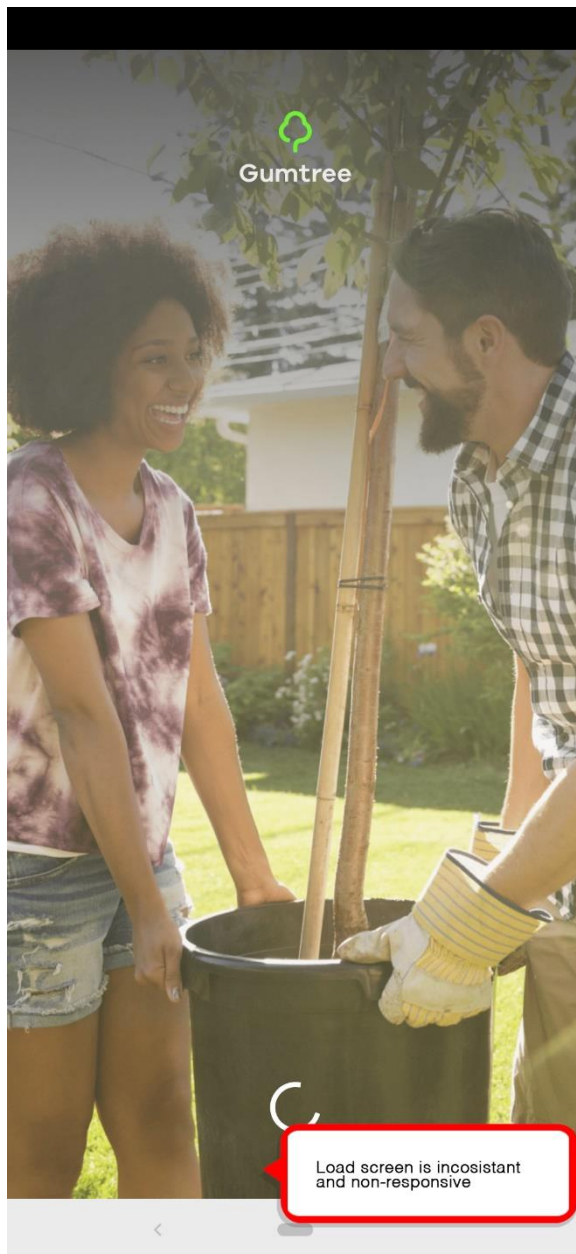


Figure 1

The loading screen is not responsive to all compatible devices.

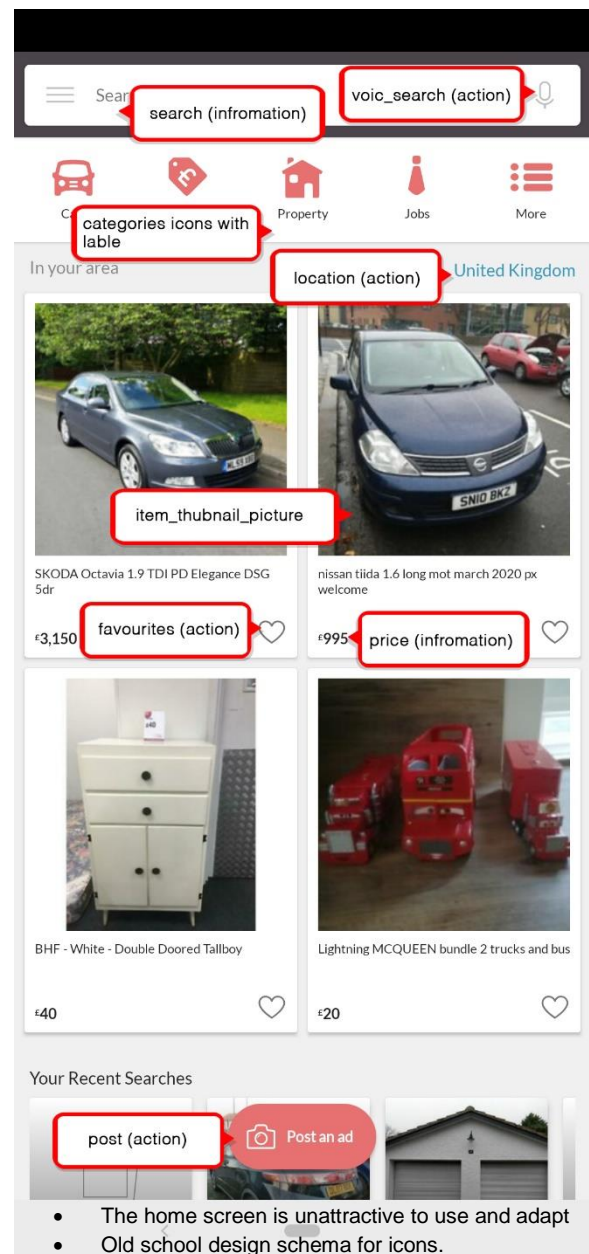


Figure 2

- The home screen is unattractive to use and adapt
- Old school design schema for icons.
- Dull colour choice in the trend of modest design era.
- The favourite icon is an outline button upon a dynamic.

Other issues can be discussed later in the design description.

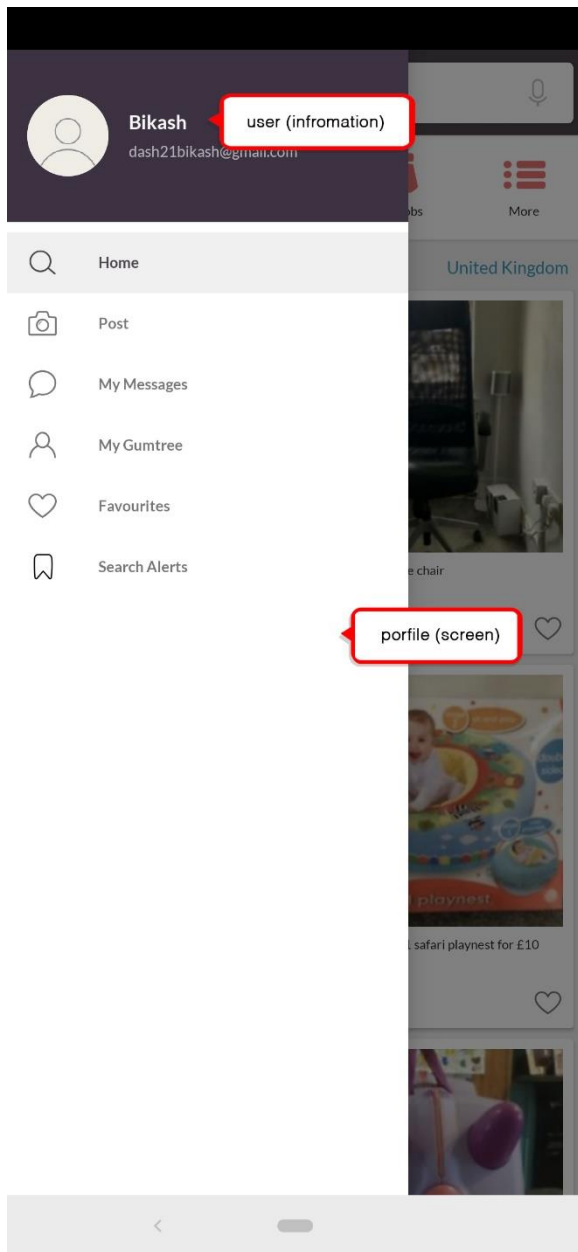


Figure 3

- The *profile* section is uncanny which makes it intruding to use
- Forceful action leads to uninstalling the application.
- Zero navigation animation to make the application interesting leading to customer loyalty.
- The sidebar section needs to make the sections more systematic and bold in design.
- Primary CTA button Setting isn't there which makes it tough for the user to find one.

Other issues can be discussed later in the design description.

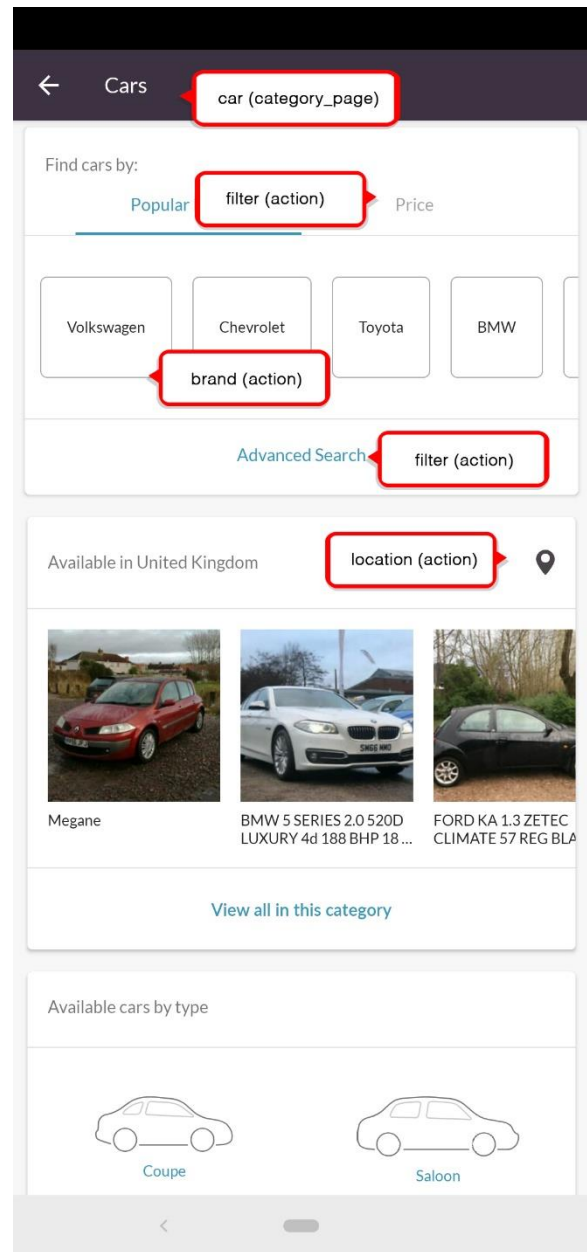


Figure 4

- The *car* category needs a design element reshuffle.
- CTA for price action in the secondary tab is a mile for action.
- Transparent CTA's for each of the segment, and minimum screen levels.

Other issues can be discussed later in the design description.

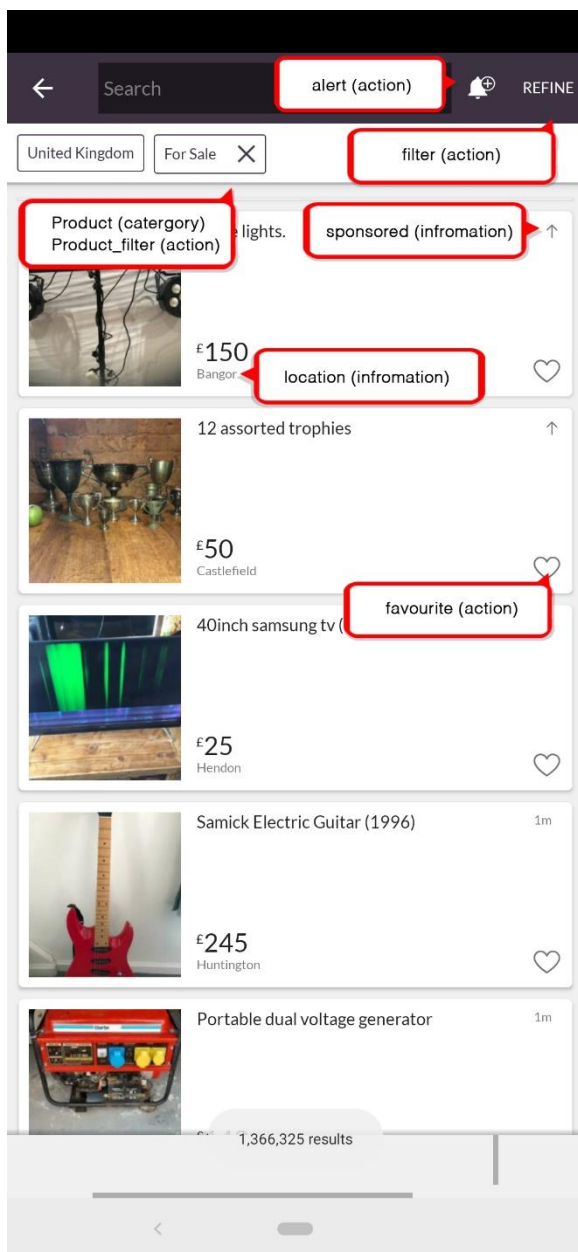


Figure 5

- The *for-sale* section is disoriented and less transparent confusing user.
- Undefined CTA buttons with less transparency.
- The annotation of sponsored information in fig.5 is misleading or confusing.
- The location is not labelled and is not highlighted to distinguish in cards.
- Favourite button isn't labelled or defined.
- Two buttons with same CTA can be redefined.

Other issues can be discussed later in the design description.

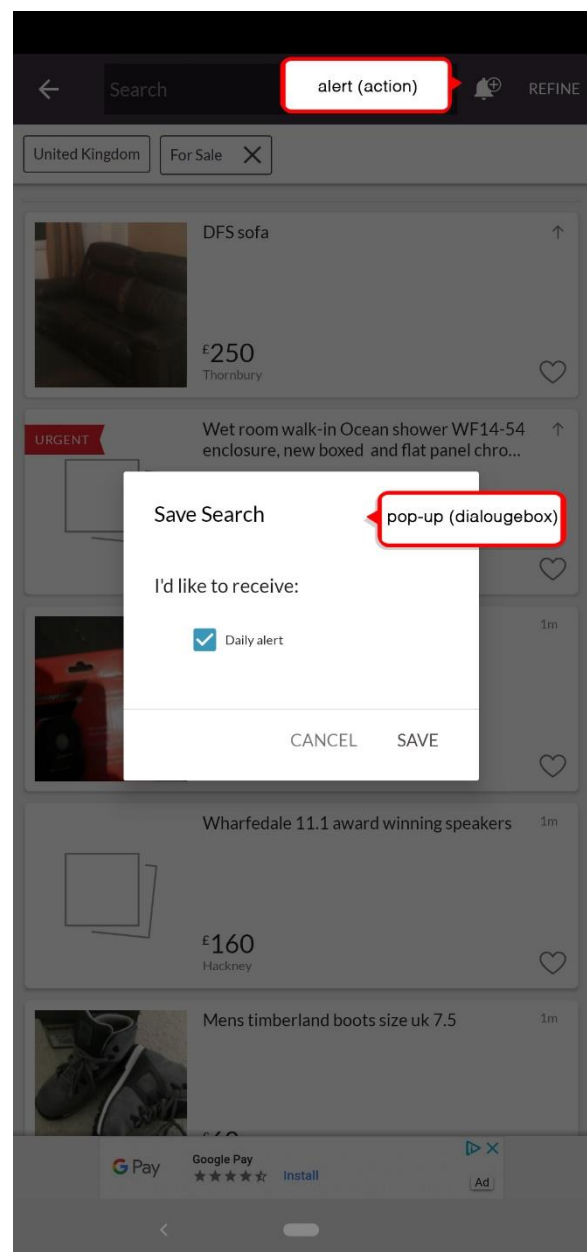


Figure 6

- Pop-up dialogue box needs more illustrative and informative.
- CTA button for an alert is functionally incorrect as it saves the category alert defined as a search alert.

Other issues can be discussed later in the design description.

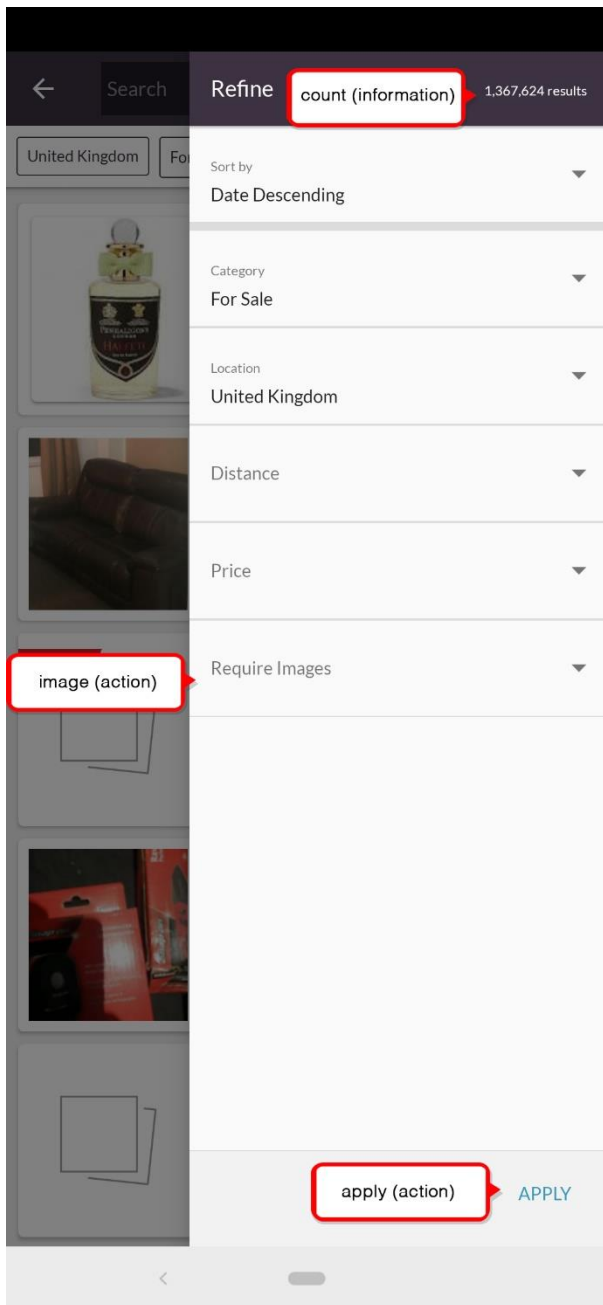


Figure 7

- Required image CTA drop-down can be replaced with a radio button.
- Make the result count animation more lively as a small beautification matter with customer loyalty.

Other issues can be discussed later in the design description.

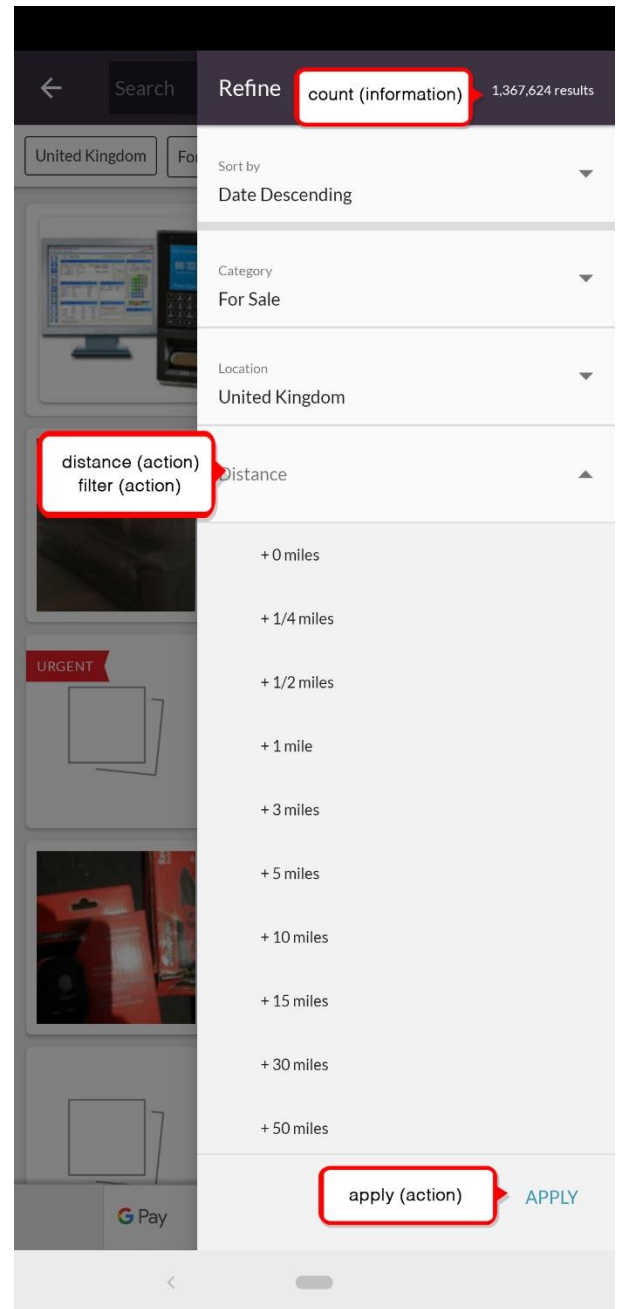


Figure 8

- The distance filter radius with list can clutter the pinpoint location clarity.

Other issues can be discussed later in the design description.

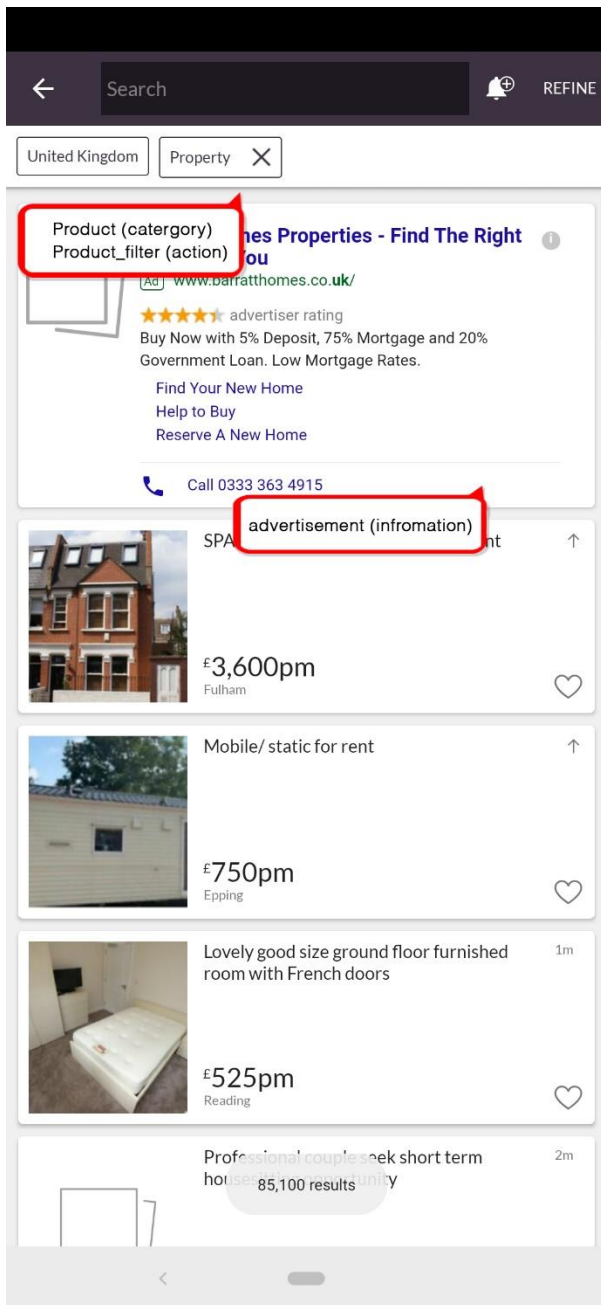


Figure 9

- The *property* section is disoriented.
- Undefined CTA buttons with less transparency.
- Two buttons with same CTA can be redefined.
- Type of property can be filtered more interactively and illustratively.
- The advertisement on the top section is insensible and a loose node to leave the application.

Other issues can be discussed later in the design description.

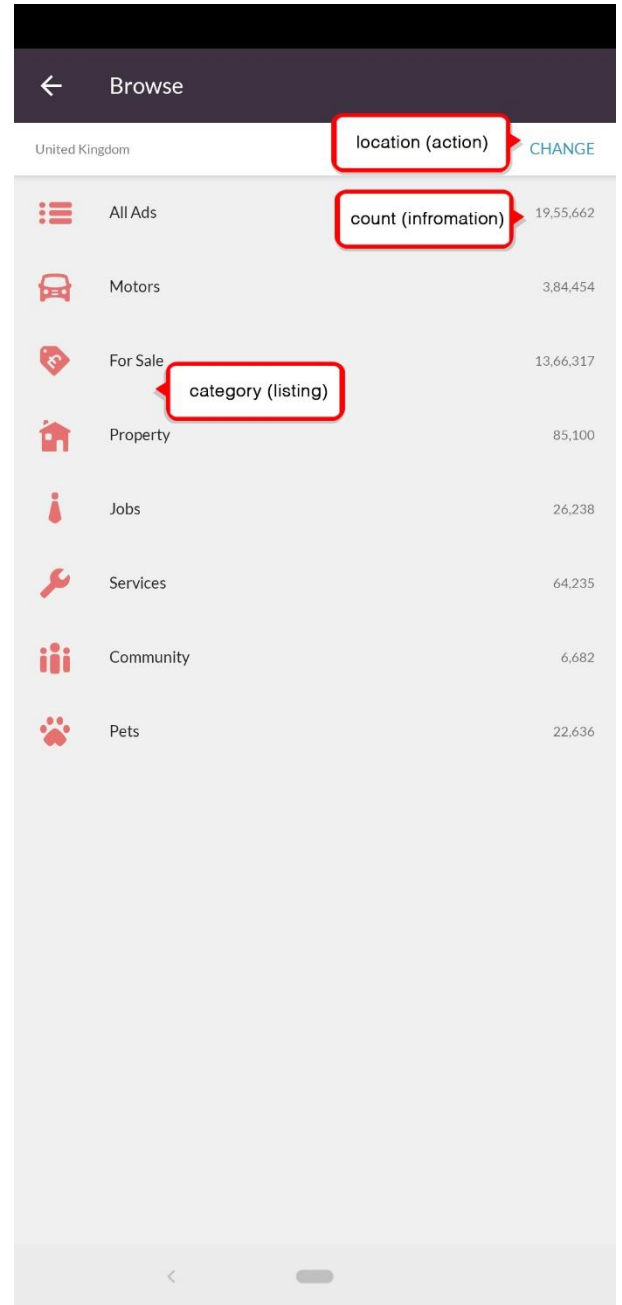


Figure 10

- The *All Ads* which is the main category page lack transparent.
- Each of the participant or most of them had and issue with While browsing for the filters.
- The subcategory can also be navigated with the search bar or can be made handier.

Other issues can be discussed later in the design description.

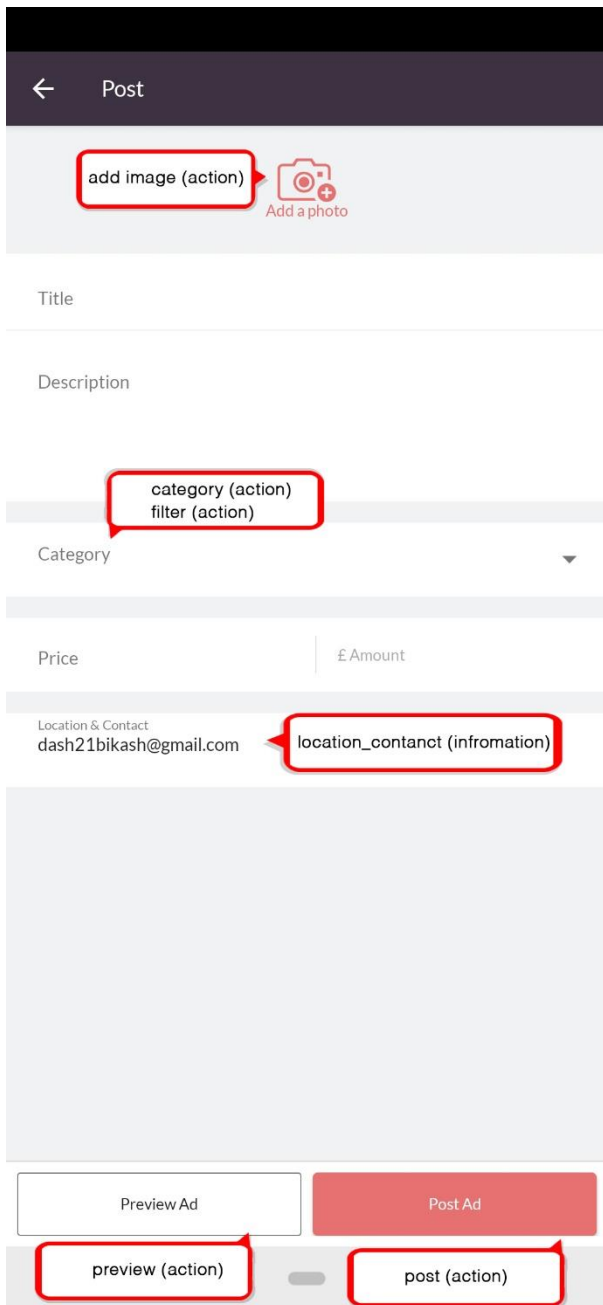


Figure 11

- CTA buttons are not highlighted or defined.
- Add image icon, lack in transparency with for defined action.
- Above also pollutes the database and quality of ads while browsing the application
- CTA for categorisation lacks transparency

Other issues can be discussed later in the design description.

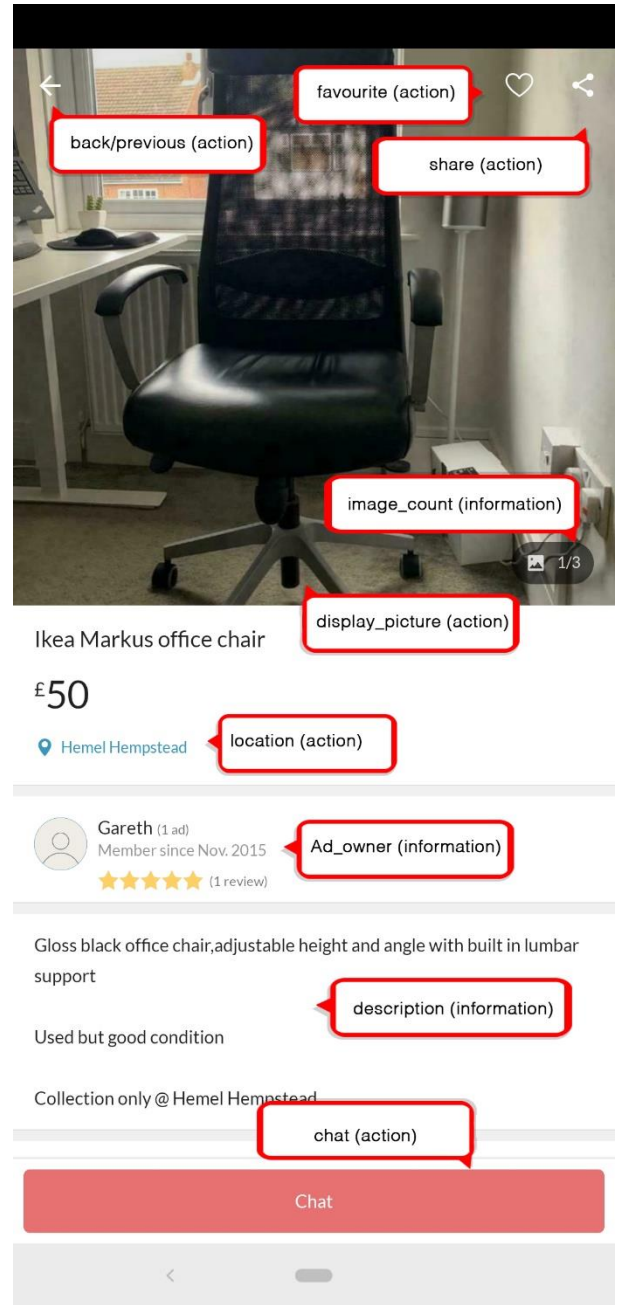


Figure 12

- CTA buttons lack transparency and information. Also outlined icons on dynamic screen may create conflicts.
- CTA button for location can be redesigned with mini-map and distance label.
- Authenticity with seller information and product description.
- Product category label is not included.
- CTA button for chat needs redesign and placed in flow.

Other issues can be discussed later in the design description.

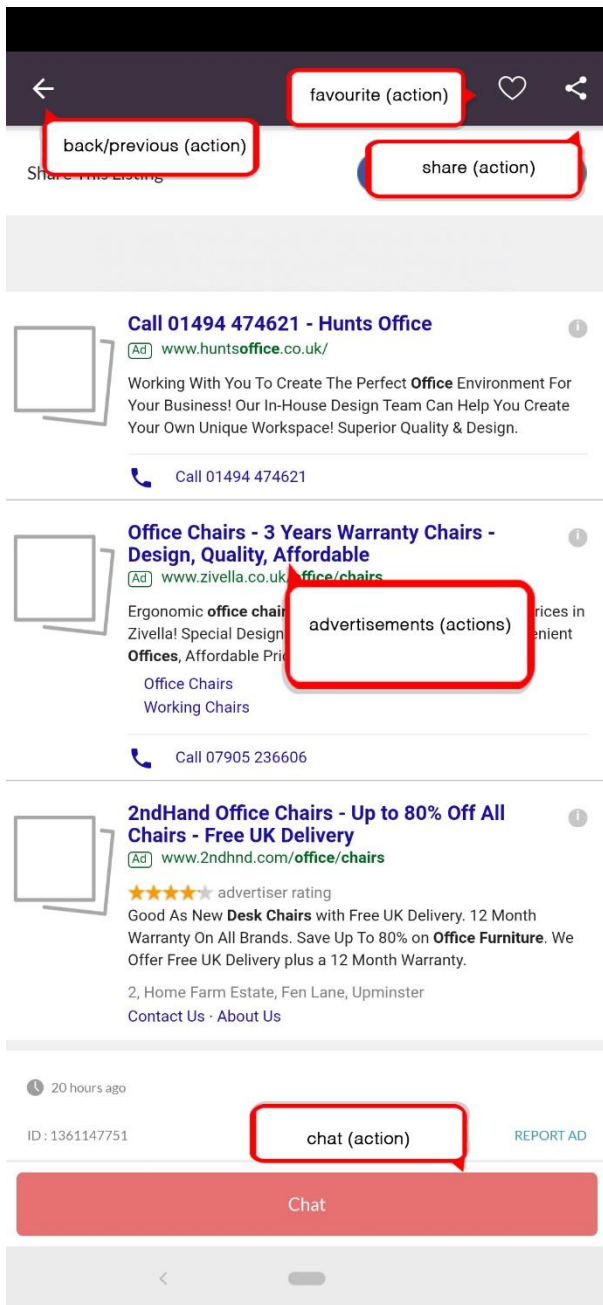


Figure 13

- Unsegmented advertisement with lesser transparency.
- Stale content presentation with no illustrative direction.

Other issues can be discussed later in the design description.

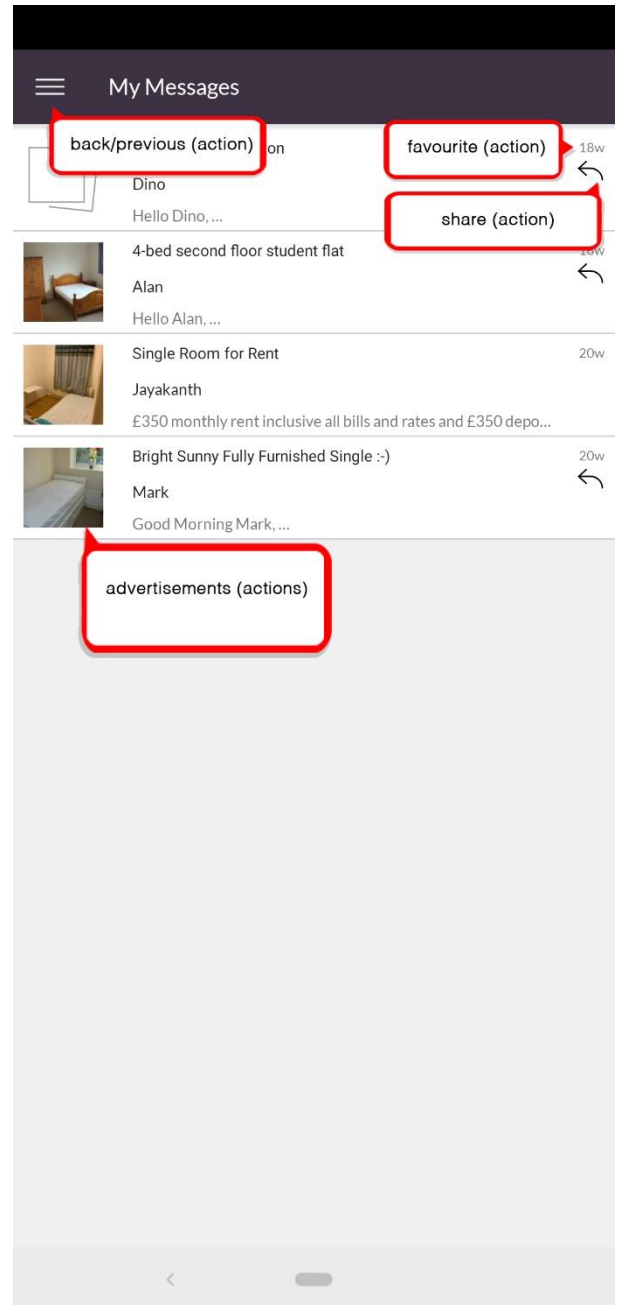


Figure 14

- The uncanny *messaging screen* makes the section less interactive.
- Uneven thumbnail for chat can also be a drawback.
- CTA button for reply is not defined and needs redesign.

Other issues can be discussed later in the design description.

2. Aim of the Usability Research

To study the usability and improve the user experience of GumTree a mobile application.

The usability of the platform is anachronistic with respect to the current design/user experience trend. The application has a clean HTA but, isn't robust enough to attract a bigger audience. GumTree is used for advertisement but in the past decade, it's catching the trend of M-Commerce (Mobile Commerce). But the standards of user experience is still low lying and the platform stuck on the mark of 171 million active users and can't get any further (Gbksoft.com, 2019).

2.1 Defined Tasks

- Find 2 cars with mileage between 75K and 90K.
- Find a round table for your dining space between £20 and £90. You need a round dining table temporally, till you pick a good deal.
- Change the price for the hosted ad from £12.67 to £9.89 using the edit add option.

2.2 Research Cite

- Understand the user's path and handy action button area to use an application with an impression of the current design pattern.
- There is a possible issues with the user input for the price range which is capped with a range amount rather than user input.
- The action constrains asks the user to use the all possible feature of the application, so what and why for the resulting ratio.
- The user may find is difficult to change the decimal value as there is not factor to support the decimal value change.

2.3 List of Objectives (Deliverables):

- Study the M-Commerce platform.
- Research the standards of M-Commerce of the era.
- Prepare/Perform a usability testing (*using CIF Method & A/B Testing*).
- Evaluating Emotional Response for User Experience on both the platforms
- Study the overall findings.
- Evaluating the issue and giving insights for redesign.

With the data from usability testing which was focused on the hierarchy path taken by the participant which helped to gather as much as brains on the table. And achieved a 91.7% success. The user satisfaction results are neutral in comparison with task success score. The participants background are diverse with aspect to field of work includes User Experience (2), Software Engineering (1), Brand Management (1), International Brand Management (1) and Psychology (1). To look at each aspect of the user experience and what the universal mass accepts, the timestamp for both ends had a difference of 20min for the highest time taken and the least time taken.

2.4 Problem Statements:

The bad design interface and the outdated style guide with the current M-commerce trend, impacts on the user's emotion. The major problem with this application is the inconsistency in usability and interface orientation. The user emotion should be balanced for user engagement longevity.

2.4.1 Defining Research Cites

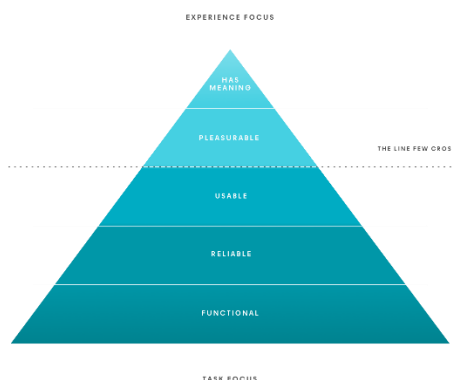
"Understand the user's path and handy action button area to use an application with an impression of the current design pattern."



2.4.2 Rule of Thumb

Thumbs are symmetrically best fit for user action and navigation. Approach to tap the centre or top makes it tough for human fingers. So user action element can be placed. Product architect will never make the element at the section (top, top right, top left etc.). (Kirhenstein, 2019).

"Analysing the emotions of a user while he/she navigates through the app browsing for the best of its outcome."



Why is designing for emotion important?

You might be asking — why does it matter? I'll refer to this small chart which is a reinterpretation of *Mazlo's hierarchy of needs*. You've probably seen it before, in many guises, essentially you could see this chart as a guide for whatever product / site you might be working on. Thus the reaction as a chart legend can help to conclude my findings. (Kirhenstein, 2019)

“Understand the emotional flux, of using standalone application and hybrid application.”

Understanding the flux input and the difference between the user's relation towards Standalone application (GumTree) for M-Com and experience of Hybrid application(Facebook). To understand if there is a disturbance factor that can drive the user towards socialising and shopping.

3. Method

3.1 Method overview

The testing procedure includes two different sets of data for evaluation of the usability and user experience with respect to the selected application on android device. *CIF Standard Usability Testing* and *Emotion Evaluation for Usability Testing* method is followed. The standards for testing were approved and well tested with all platforms and devices.

Why did the research follow CIF method?

The CIF method provides greater visibility and consistency in describing usability testing processes and reporting those results.

- ‘Customized’, as an illustrative example template for electronic health records.
- Primarily, intended for ‘summative’ or validation usability testing
- Extended for ‘formative’ or exploratory usability testing

CIF is a document outline for reporting usability testing methods and results. By providing a standard outline we can demonstrate evidence of usability activity in a format that allows independent evaluation of tasks in a single product and comparison across multiple products. And a reporting framework within current best practices.

Measures of effectiveness and efficiency, and recommends including subjective satisfaction data. Measures for efficiency may include:

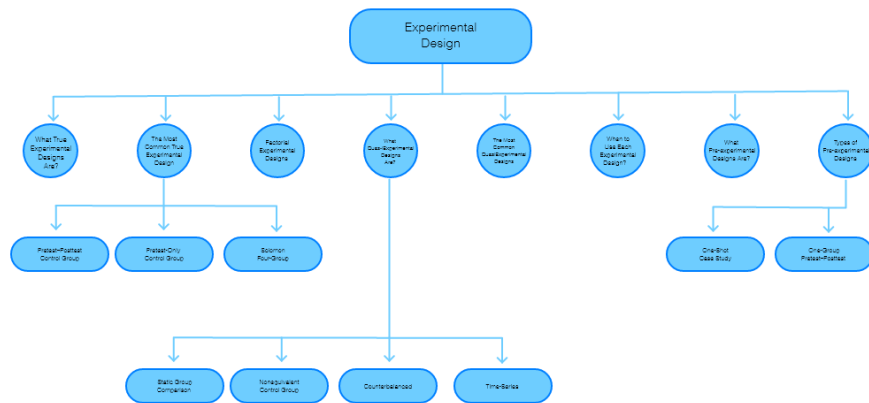
- ‘Too many clicks/taps’
- Task time
- Completion rate efficiency
- Number of references to the manual

Measures for effectiveness may include:

- Completion Rate
- Number of Errors

Measures of satisfaction may include:

- System Usability Scale (or SUS)



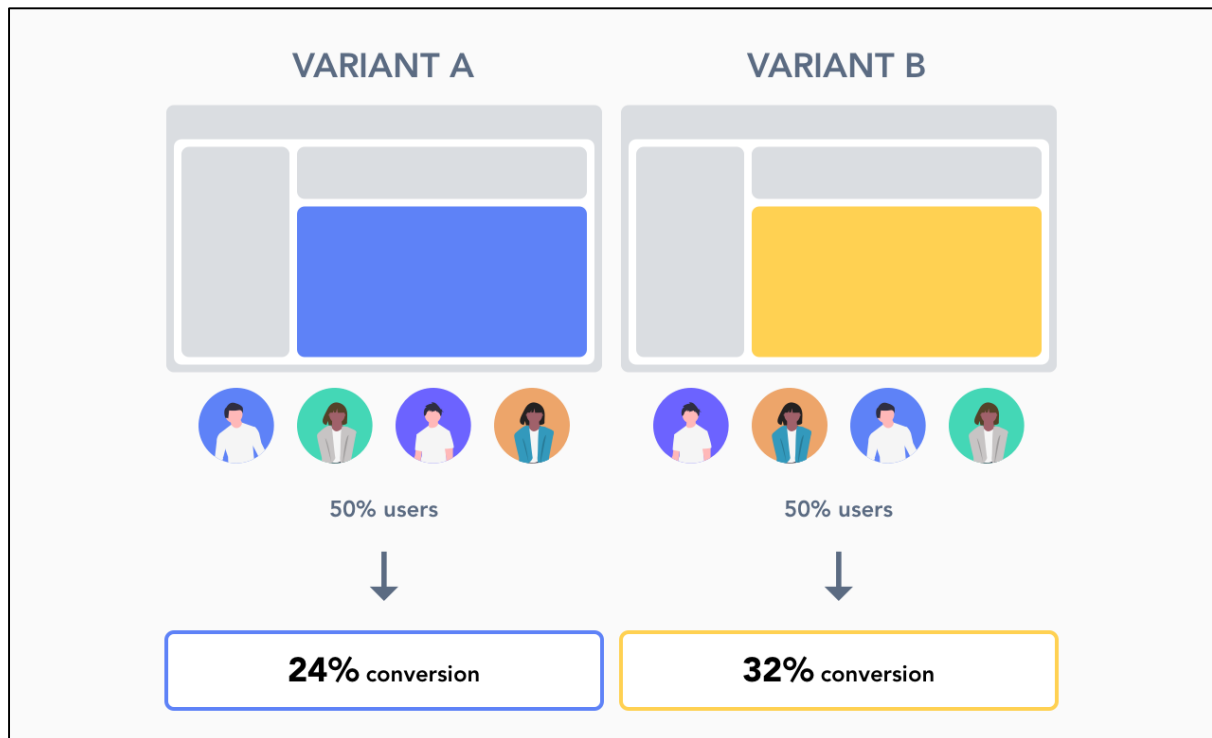
(Martella et al., 2019)

Usability tests help researchers to make insights from the task session. Establishing cause-and-effect relationships among variables is the focus in this research. The experimental research designs described in this chapter test for the presence of a distinct cause-and-effect relationship between variables. In order to achieve this goal, experimental research must control extraneous variables. The results of a study using an experimental design indicate whether an independent variable produces or fails to produce changes in the dependent variable. (Martella et al., 2019)

The findings of A/B testing, which is used to achieve evaluated performance data from each participant to understand the difference easily and reach a conclusion sooner. A/B Tests are effective with a large sample of users over a fixed period of time (often a week or so). (Christy, 2019)

It is best to only change one thing at a time in order to determine the effectiveness of each change. Here is a list of design points that you can easily test:

- Colors
- Logo placement
- Text button
- Layout
- Images (size, placement)
- Title
- Content



(Christy, 2019)

Conversion is the fact that a user performs the desired action, and results in action of the applications design consistency better.

A/B testing is a good way to learn behaviour patterns and peculiarities of the target audience. By testing different versions of UI, designers can see what kind of influence each solution has good impact aesthetically. This is a principle factor for user satisfaction. Moreover, A/B testing assists to remove bad design decisions if there were ones and replace them with something more profitable.

Here is a list of elements which designers often choose for A/B testing.

- CTA buttons (their placement, size, colour or copy);
- Headings and sub headers;
- Images on landing pages;
- Presentation of clients' form on websites;
- Copy (length, placement, and content);

Before the researcher recruited the participants, he considered what criteria I need to apply while recruiting so that the participants can provide relevant insights for his project. Also, he kept in mind the fact that "Deciding on the right number and type of criteria for research participants is a balancing act." (The Interaction Design Foundation, 2019)

Following are the essential criteria that the researcher considered:

- Participant have you participated in any mobile interface testing in the past six months?
- Participant mark your preference of using devices for browsing.
- Participant, how likely do you accept the evolution of mobile user interfaces to date from the past 8 years?

- Participant, have you ever been tested of your emotions while using an application?
- Participant, how long have you been using mobile phones towards e-commerce?
- Participant, how will you accept using an e-commerce application which is a feature of a social media network against using a standalone application dedicated to e-commerce only?
- Participant, how will you react to relevant advertisement for the primary search items while browsing one? Example, Similar Products
- Participant, how would you prefer shopping used or refurbished items to create a balance to the flooding product market which creates lots of e-wastes?
- Participant, have you ever came across an e-commerce platform that sells used and refurbished items? If Yes please choose one.

3.2 Experimental Design on Report:

Structure:

Adapting the simple design structure and inside the group approach considering only one independent variable form a small participant pool. This makes no difference with participant's general view and options biased decisions.

Approach:

The mixed approach to account objective response and usability flaws. To avoid possible confounds in this study, each participants performed the same task across both the platforms GumTree and Facebook Marketplace.

Format:

The researcher followed standard industry methods for reporting usability test findings. Most appropriate evaluation method for summative usability testing is *Common Industry Format (CIF)* – an international usability reporting standard. The second method that the testing includes is A/B comparison testing. Where the data input was from two different platforms.

Time Venue & Procedure:

The evaluation was conducted in two weeks' time; each participant was asked to perform it in an android device with the consent (participant) venue and time.

These procedures have been adapted for the evaluation:

- Field studies (observe users in natural settings)
- Observations
- Interview
- Tasks
- Emotion Test Evaluation (defined task)
- Questionnaire

- The evaluation was planned and conducted systematically to avoid possible confounds in this study.

3.2 Participants Characterisation:

A majority (about 80%) of usability issues will be observed with the first five participants (Lewis, 1994; Nielsen & Landauer, 1993; Virzi, 1992). According to this study and applying the rule of thumb 5-10 participants are enough to get reliable feedback.

The target user group should have a diversity with the pool of participants those have a better understanding of the market, human psychology, tech-savvy and bit of a novice towards the use of such application. But this report has a pool of

- User Experience
- Brand Management
- Graphics Design
- Psychology
- Project Management

	Age Group	Gender	IT Exp.	Ecommerce Shopping experience	Have you ever used GumTree?	Have you performed emotion based user testing?	Participate d in a Usability Test?
Angie	26-35	Female	>5 years	Yes	Yes	No	Yes
Anno	16-25	Female	>5 years	No	No	No	No
Edward	26-35	Male	>5 years	Yes	Yes	No	Yes
Euon	26-35	Male	>5 years	Yes	No	Yes	Yes
Ravi	16-25	Male	>5 years	Yes	No	No	Yes
Serkan	16-25	Male	>5 years	Yes	Yes	Yes	Yes

The decision of m-commerce user pool selection of such participants were based on various factors such as Age, Gender, IT Experience, Ecommerce, GumTree experience, Emotion Based testing, usability testing with experience. The researcher makes this transparent with participants domain and selection criteria to explore each phase of product development.

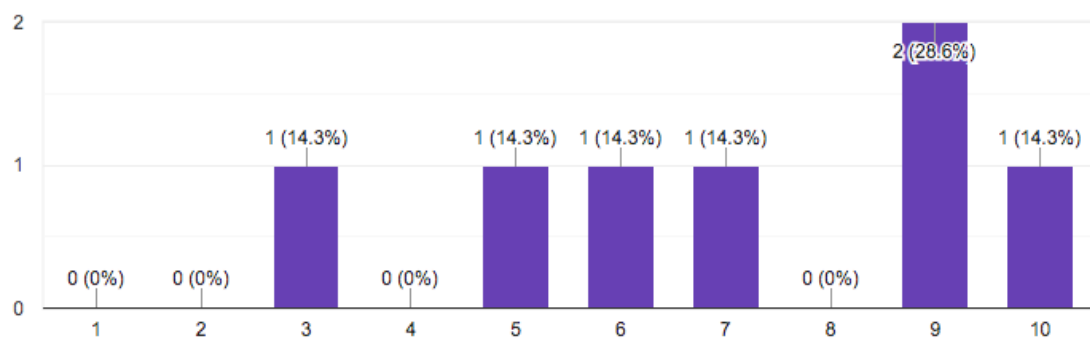
Participants Domains	Selection Criteria
User Experience Design	<ul style="list-style-type: none"> • Design of Humour • Experience in making a design style guide • Better design evaluation • Interaction flow analysis • Universal Design Language

Brand Management	<ul style="list-style-type: none"> • Product value • Brand and product scale • Target audience understanding • Brand design value • Experience in marketing product • Design impact on users
Graphic Design	<ul style="list-style-type: none"> • Colour Theory • Icon Elements • Shapes • Placement • Creative • Illustrative • Minimalistic Designs
Psychology	<ul style="list-style-type: none"> • Behavioural Analysis • Emotion Reaction Analysis • Design Adaptation • Universal Sign for interaction
Project Management	<ul style="list-style-type: none"> • Actions of iteration • Evaluation of time management • Application productivity • Market Efficiency

3.3 Secondary Survey:

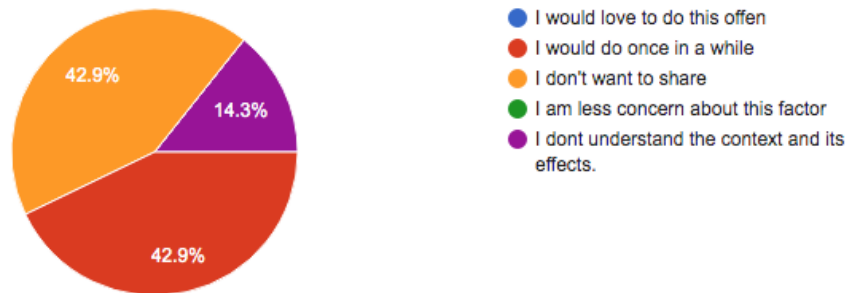
Participant, how will you accept using an e-commerce application which is a feature of a social media network against using a standalone application dedicated to e-commerce only?

7 responses



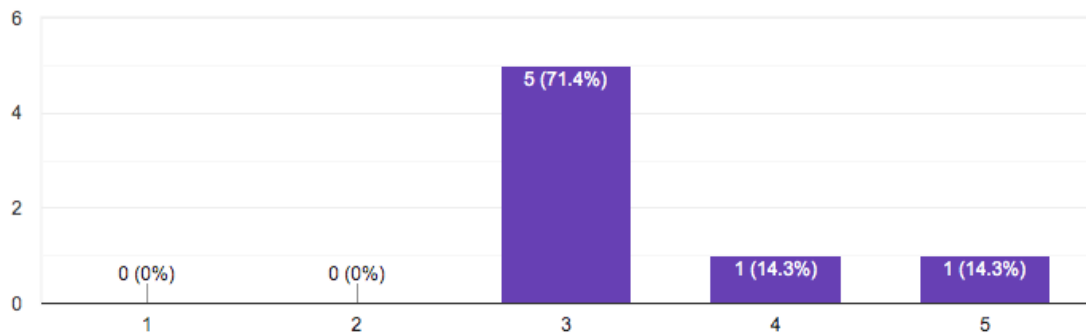
Participant, how would you prefer shopping used or refurbished items to create a balance to the flooding product market which creates lots of e-wastes?

7 responses



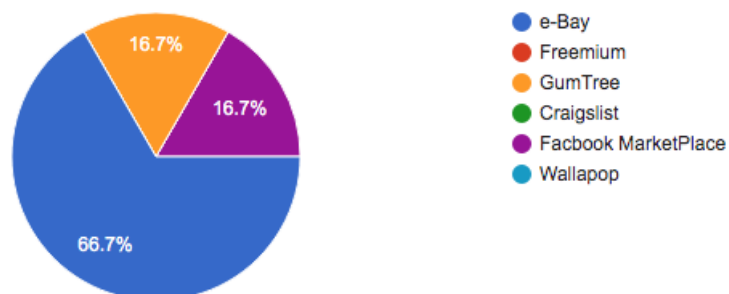
Participant mark your preference of using devices for browsing

7 responses



Participant, have you ever come across an e-commerce platform that sells used and refurbished items? If Yes please choose one.

6 responses



Limitation of Approach:

- Lack transparent towards data mining and data segregation.
- Lack of qualitative approach in the search query.
- The business model of the sample isn't robust and less adaptive towards using the recent technical approach.

3.4 Tasks:

Industries on market need an equal platform to make a sound competition and it's a factor of cut throat business step which needs a redesign to the platform as this application has one of the finest market audience who is option less for the switch in the marketplace. So the user goal should be more defined with this test evaluation process. Thought report or task doesn't focus on the perspective of the advertisers also with certain loopholes to fill. The tasks are defined with such path that the participant as a user will have flawed parameters to act on. This can give a good redesign recommendation. The design challenges that have a list of creative and usability fixations.

Task Classification:

- Interaction towards the interface of block design
- Usability elements interaction towards results
- Evaluation of persistence towards the hierarchical task
- Comparing Products
- Evaluation of navigation and secondary action items hitch to use
- Problem discovery
- Creating an overall sound and positive UX

#	Task Name	Reasons for creating the task	Walkthrough
iTest	Free use of the application and look around the ins and outs.	iTest was made to take an emotional impression of the user as first impression is always honest.	Open GumTree > Scroll Home screen > Explore all clickables > Open an ad > Look on categories > Open sponsored ad and navigate back
1	Find 2 cars with mileage between 75K to 90K.	There is a possible issues with the user input for the price range which is capped with a range amount rather than user input.	Cars>Filter by Brand/Price Refine/Mileage >Select an option>End
2	Find a round table for your dining space between £20 to £90. You need a round dining table temporally, till you pick a good deal.	The user has certain filtering constraints to use for a better search result, is also a flag to check the ease of its use.	Search>" desired keyword">Change in location(optional)>Change Price (optional)>Select an option>Note the price and location>End
3	Change the price for the hosted ad from £12.67 to £9.89 using the edit add option.	The user may find is difficult to change the decimal value as there is not factor to support the decimal value change.	Search>" desired option">Change in location(optional)>Change Price (optional)>Select an option>Save the item>Repeat the same process as above till this note>Go to favourite/save>Note the price and location>End

Task Table with cited reasons and walkthrough

There are two such tasks that are not in the process of evaluation but has relevancy for a sound report with emotional insights. This may not impact the overall finding but will help the redesign consideration. The emotion behaviour test is also a part of industrial product in the process of iteration. But the emotions are not a tangible factor to conclude, other tasks are the legends three quadrants of scale to get good statically insight.

To fuse the emotions and mark a difference it is introduced at the beginning and end of the testing. One with free fingers and others with constraints of defined interaction. The platform in comparison with the host testing application was also tested with same methods and task including emotions. But the results can just be used as reference not a guideline to follow.

3.4 Metrics:

The ISO/IEC 9126-4 approach to Usability Metrics:

The ISO 9241-11 standard defines usability as “the extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use”. The reason why I marked effectiveness, efficiency and satisfaction in bold is that this definition clearly states that usability is not a single, one-dimensional property but rather a combination of factors. (Mifsud, 2019)

The ISO/IEC 9126-4 Metrics recommends that usability metrics should include:

Effectiveness: The accuracy and completeness with which users achieve specified goals. (Task Success Rate)

Efficiency: The resources expended in relation to the accuracy and completeness with which users achieve goals. (Time to complete task, number of errors, number of Assists)

Satisfaction: The comfort and acceptability of use. (SUS questionnaire)

$$Effectiveness = \frac{\text{Number of tasks completed successfully}}{\text{Total number of tasks undertaken}} \times 100\%$$

Usability Metrics 1

$$Time Based Efficiency = \frac{\sum_{j=1} \sum_{i=1} \frac{n_{ij}}{t_{ij}}}{NR}$$

Usability Metrics 3

1. I think that I would like to use this system frequently

Strongly disagree					Strongly agree
1	2	3	4	5	

Usability Metrics 2

3.5 Materials:



Participant information sheet / informed consent
Moderator script

Google document, for easy remote sharing



Screening of questionnaire

Google forms, for easy remote sharing



Task instruction sheet
Observation log – sheet

Google forms, for easy remote sharing



Post-test questionnaire / SUS
User performance data sheet

Google forms, for easy remote sharing

PARTICIPANT'S COMPUTING ENVIRONMENT	REASONS FOR SELECTING THOSE PLATFORMS/DEVICES.
Android Mobile OnePlus 6T Android Version 9	The device provided by the moderator that support application used for testing. Updated
Android device screen recording	The in-built screen recorder also collect the screen navigation, and mic records the voice and conversations.
UXReality	This device is used for eye tracking and emotion evaluation and records the screen and audio.
GumTree	The host application for the usability testing.
Facebook Marketplace	The competitive application with some design and architectural design.
Google Maps	Some users navigated to the maps to check distance.
Citymapper	Some users navigated to the maps to check distance.
Chrome (Mobile)	All the ads from both the application redirects to chrome.

MODERATOR COMPUTING	ENVIRONMENT
Legion Y520	Timer
Windows 10 Pro	Calculator
Screen 15" Laptop Screen	Chrome (Laptops)
Google Forms	Any web platform

3.6 Procedure Description:

The procedures are divided into seven phases and each section have their own finding results satisfying one of the problem statement or research finding with data. The phases include:

- Impression Tests (includes emotions)
- Pre-Test Questionnaire
- Task Instructions
- Usability Testing
- Emotion Evaluation
- Post-Test Questionnaire
- SUS

The phases contained the following steps:

Impression Test

1. The participants need to get some times to brief and answer the pre-test questionnaire.
2. In terms of studies, it's a psychological break or warmup for your brain to perform a set of tasks.
3. And in terms, you get resourceful data about the participants.

Task Instruction/Usability Testing

6. The participant is introduced to task challenges and goals.
7. The participant is given with the application open with the respondent screen. The participant needs to put the id received to start the testing.
8. Now the participant can choose from two applications on which to perform a test first.
9. Moderator observed the behaviour and controlled the session.
10. Moderator also measured time on task, amount of errors, assists and took notes (satisfaction assessment and suggestions for improvement) and quotes.

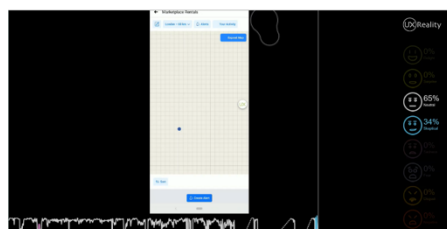
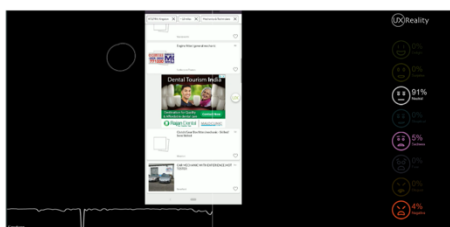
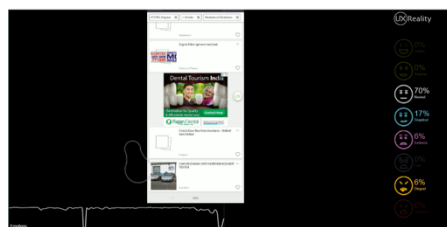
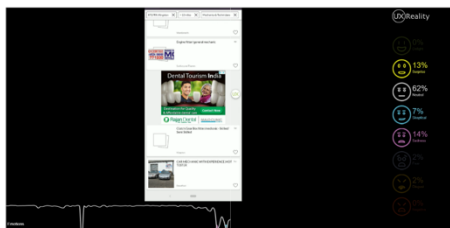
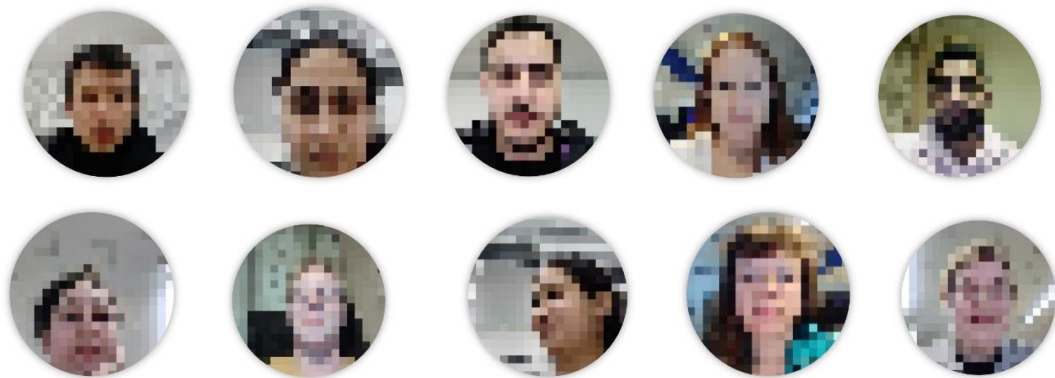
Pre-Test Questionnaire

4. Impression Test was conducted with 12 participants those just followed the instruction iTest and results.
5. The participants just need to browse the application freely without any Do's and Don'ts.

Emotion Evaluation /Post-Test Questionnaire/SUS

11. The participant will now perform the emotion testing following the task instructions.
12. The participant needs to do it in both applications.
13. After the test completion, the participant needs to do the post-test questionnaire.
14. At the end of the test, there will be thorough discussion on the ups and downs of the tasks and other factors that affected the task.
15. Participant will be given SUS evaluation sheet.

3.6.1 Impression Test Participants



The impression testing had a good insights of emotions towards the M-Commerce platform and the action elements. The placement, the shape, the design and the colour impacts the user's emotions. The emotion parameters are standard emotions with set of 7 are mapped. The lack of heat map made the process incomplete as to get correct section of interface to map the user emotion towards impression of application.

The samples are in the drive linked to this report will give a clear insight of human emotions for set of parameters of emotion.

Impression Test Sample Screens.

3.7 Expected results:

Usability Expectations

- The user may face issues with the filters.
- The user may face technical glitch while the screen is loading
- The user may find some categories missing
- The user may be confused with the distance filter for (miles vs km)
- The user may skip certain tasks due to poor placement of action elements with dull colour
- Complaint about the advertisements popup in each screen which can annoying
- User will have issues unable to find certain products and it will need more actions to achieve it.

4. Results & Recommendation:

Summary of the overall finding:

Over six participants only one of the participant got the desired result but the was not satisfied with for the efforts for the results, which was too much to do for simple browsing. The average SUS is 57 (56.66). Most participant's emotions flux has a lot of disturbances. There was a balance between a number of the person visiting the website again and will not be visiting again as one participant stood neutral, leaving 2 participants to Strongly disagree and 2 participants' Strongly agree.

45.5% of people find the website unnecessarily complex and would need help of a technical person. Which is almost half of the pool. So the flaw is not quite defined to them. The Participant 5 felt would using search bar its quite tricky to use the application, as the path is not defined with proper categorisation.

Most of the user had an issue with the categorisation labelling and using the filter option. And as per finding the filter give the efficient results. This makes a potential risk towards the cutting edge of the user count and depletion in downloads.

The location parameter was quite a factor that made most of the users confused with miles and list option to select and most of the users prefer using a slider/radius map to get accuracy in the results.

The search results were not sorted in order making relevance to price and location, which was each tasks prime motive for better finding.

The favourite button and chat button was not clear enough to tap on, and the positioning was quite odd, this made most of the users confused with no prior use to the application.

4.1 Performance Data:

The performance data is well segregated to respect to each task. And the testing resulted 2 failures out of which one had a partial failure for Participant 6 between P6 and P5.

The inconstancy in the flow, with a factor of small incompetent attributes made the average time for each task to

Task 1: Stated to have the simplest HTA, and was easy to perform for novices, but some of them lacked with the growing design culture.

“Find two cars with mileage between 70K to 90K. Without using search bar”

Participant	Unassisted Task Effectiveness [(%) Complete]	Assisted Task Effectiveness [(%) Complete]	Task Success	Assists	Errors	Task Time (mm:ss)
1	0	100	1	4	3	03:03
2	100	0	1	1	0	01:25
3	100	0	1	1	1	01:03
4	100	0	1	1	0	01:22
5	0	0	0	0	0	00:00
6	100	0	1	1	0	02:52
Mean	83.3	16.6	0.83	1.33	0.66	01:33
Standard Deviation	37.2	37.2	0.37	1.24	1.10	00.92
Min	0	0	0	0	0	03:03
Max	100	100	1	4	3	01:03

Task 2:

“Find a round table for your dining space between £20 to £90. You need a round dining table temporally, till you pick a good deal without using search bar”

Participant	Unassisted Task Effectiveness [(%) Complete]	Assisted Task Effectiveness [(%) Complete]	Task Success	Assists	Errors	Task Time (mm:ss)
1	0	100	1	1	1	04:27
2	100	0	1	0	0	02:15
3	100	0	1	0	0	01:57
4	0	100	1	1	1	02:59
5	0	100	1	1	0	01:02
6	100	0	1	0	0	01:10
Mean	50	50	1	0.5	0.33	2.11
Standard Deviation	50	50	0	0.5	0.47	1.11
Min	0	0	0	0	0	04:27
Max	100	100	1	1	1	01:02

Task 3:

“Change the price for the hosted ad from £12.67 to £9.89 using the edit add option.”

Participant	Unassisted Task Effectiveness [(%) Complete]	Assisted Task Effectiveness [(%) Complete]	Task Success	Assists	Errors	Task Time (mm:ss)
1	100	0	1	0	1	05:17
2	100	0	1	0	0	02:49
3	100	0	1	1	2	01:17
4	100	0	1	1	0	03:17
5	100	0	0	0	0	02:12
6	0	0	0	0	0	02:54
Mean	83.33	0	0.47	0.47	0.76	2.84
Standard Deviation	37.26	0	0.66	0.33	1.10	1.14
Min	0	0	0	0	0	05:17
Max	100	0	1	1	2	01:57

SUS:

Participant	Score
1	27.5
2	80
3	60
4	45
5	55
6	72.5
Mean	56.66
Standard Deviation	17.3

4.2 User Experience Issues:

Count	Statement of Issue	Redesign Recommendation	Priority
Browsing Process Elements			
1	The icons design are not compatible with the environment of the application	New style guide for icons	Medium
2	The category listing and labelling is flawed.	Restructuring the listing with icons.	High
4	Placement for CTA of chat is flawed so new users struggle to find it.	Need to make a more engaging element with chat button redesign	High
5	Location search is a list which decreases the pace and frequency of user for better search	Can change it to sliders for increase and decrease in distance	Medium
6	Location icon needs to be changed	Increase the size and look for alternatives	Medium
7	User has to dig in to find the profile settings, which is intruding	Need to introduce in the profile section	Low
8	“Reference image” filter is a dropdown	Can be a radio button	Low
9	The product description section is almost empty which lacks description, category, listing date etc.	Can be countered by introducing the attributes.	Medium
10	The messaging screen is dull and not responsive with minimal or small interactive elements without labelling	Can be improved with standard messaging interactive elements.	Medium
Navigation Issues			
1	The category listing is not easy to navigate to and fro.	Introducing a search bar	High
2	The filters in the search opens up the whole filter screen blocking a task goal.	Overlay pop up or dropdown	Medium
3	User cannot navigate from any page to home screen with one defined action buttons.	CTA to redirect to home screen.	Low
4	Car category made tabs just for pricing filter.	It can be done with a slider overlay to make it more optimized	Low

5	No option to discard an action if you leave an ad posting halfway.	It should have a discard option	Medium
6	Click on ads redirects you to browsers without authenticating the destination. And it makes a novice use harder to find the way back to the screen.	The action should be authenticated within the application.	High
7	Two CTA buttons for same screen.	The action buttons should be defined of specifying filter relevant to make the results finer	High

General Issues

1	The loading screen isn't optimized/responsive to all device screen size.	It can be reworked to make it more better graceful.	High
2	The instructed and irresponsive ads placement without skeletal structure and briefing	Can be defined with a section and be more informative to make it clickable with authentication.	Medium

5. Discussions:

The evaluation was more focused on improving the design signature rather fixing the usability issues as the issues are just made up due the improper design bridging. This creates the turn down of users from the application and the low screen time.

The participant's had their note on each session which can be better discussed here, with reference:

Participant_1 "Quoted about the lack in design aesthetics" and Participant_2 had an issue to switch between KM and miles. Rest of the participants had similar issue with the filters and categorisation.

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Link to Prototype:

<https://projects.invisionapp.com/prototype/ckdu7t6vm002o1v01jbqh39gh/play>