Results – context of use analysis

Human-Computer Interaction Project

Team 1

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Description of the work done

1.1.   Summary of activities performed

For this analysis of the context of use we performed 9 interviews, conducted 3 contextual inquiries, and performed an ethnographic observation. The 9 interviews were conducted with five students, three remote workers, and two gastronomy managers. For all contextual inquiries we observed students performing tasks to research establishments that allow computer use and to check modalities and rules for the found places. For the ethnographic observation we observed multiple customers of a coffee shop in how they used the establishment for their remote work.

Session	Date	Place	Type of session	Observed users	Interviewed users
1	20.02.24	Imdea building, room 279	interview, contextual inquiry	2	3
2	21.02.24	Imdea building, room 279	interview	1	2
3	22.02.24	Imdea building, room 279	interview	1	1
4	23.02.24	Zoom	interview		1
5	25.02.24	Zoom	interview		1
6	29.02.2024	Urraca Cafe	ethnographic observation		
7	29.02.2024	Zoom	interview		1

1.2.   Deviations

During the execution of the beforehand constructed plan we had to make some adjustments to respond to feedback and handle external circumstances. Some appointments for observations and interviews had to be adjusted according to the participants requirements. Additionally, we changed our protocol to include demographic questions and a more detailed description of our ethnographic observation.

Deviation	Aspect	Explanation
1	Added demographic questions	In the first iteration of the planning we didn't include demographic questions. (See Annex B for the complete questions).
2	Added participants to be interviewed	We wanted to get more insight after some interviews done with different students, because

Deviation	Aspect	Explanation
		not all of them actually go to places outside of home or school to work/study.
3	Detailed the observations' descriptions	We got more in detail about how we will perform the observations and what we want to get from them, in particular for the ethnographic observations.
4	Detailed the ethnographic observations' template	We enriched the template to organise better the information gathered and to get a more detailed one.
5	Detailed the contextual inquiry template	We enriched the template to organise better the information gathered along the contextual inquiries conducted because the previous template did not fit all the information given by the users.

1.3.   Summary of observations

Contextual inquiry

- 2 out of 4 participants started their search with Google Maps, indicating its importance as a go-to tool for location-based searches. This was an expected behaviour given the task's nature. The other 50% opted for using a search engine tool, indicating a difference in approach possibly due to differing needs or experiences.
- A consistent step across participants was checking photos and reviews of potential places. This shows the importance of visual and social proof in decision-making. 2 out of 4 participants checked the images in Google Maps only, while the remaining 50% looked at those posted online. Only one participant (RemoteWorker03) inspected locations' instagram feeds to gain additional insights.
- All participants were concerned about a location's operating hours and peak times, which could affect their ability to study or work comfortably. One participant was even pleasantly surprised by a cafe's operating hours, showing that unexpected benefits can heavily influence choices, confirming our expectations
- 3 participants out of 4 sought more information on official websites, although not all found the details they needed. Although we were convinced users would go down this road, not finding enough information to make an informed decision online was quite a surprise.
- Only 2 participants out of 4 were notably influenced by environmental factors, such as the temperature in a library photo, indicating that comfort plays a significant role in decision-making. In the case of RemoteWorker03, photos showing products sold at one cafè in particular made her change idea about the place, which looked too much for coffee snobs. It really struck us how they paid

attention to details we thought would not account during decision making processes.

- We were surprised when one participant encountered misleading information on Google Maps about library closures, highlighting the challenge of outdated or inaccurate data.
- Every participant checked for policies regarding laptop use, indicating a common need among users to ensure their primary work tool is welcome. We expected places would miss out on providing users with clear policy statements, leading participants to engage in a filtered research through Google Maps reviews. The extent to which they would research laptop policies, even digging through reviews and social media, indicates a high level of concern for this aspect.
- Only one participant out of four experienced an app crash during research (a factor we did not take into consideration) that reminded us how technical issues can disrupt the user experience.

Ethnographic observation

With the ethnographic observation we observed 8 people among students and workers in a cafè where usually a lot of them go to study and work. Particularly, students and workers who utilise the space for both productivity and socialisation. Analysing the details, we can elicit a set of generalised needs and wants for similar environments:

- Adequate table space to accommodate laptops, notebooks, and other work materials.
- Sufficient power outlets to cater to the needs of users relying on electronic devices for extended periods.
- Wi-Fi connectivity with reliable internet access to facilitate various online activities, including video calls.
- Comfortable seating arrangements that support long periods of sitting, including options for both individual work and group discussions.
- Calm and inviting decorations, along with natural lighting, create a pleasant ambiance conducive to both concentration and relaxation.
- Controlled noise levels to balance the atmosphere, allowing for focused work without complete silence and enabling soft conversations.
- A variety of food and beverage options that cater to different preferences and dietary requirements, ideally at a reasonable price point.
- An environment that encourages not just individual work but also collaborative efforts, with space configurations that support small group interactions.
- Flexible policies regarding device usage and seating to accommodate peak times and different user groups without significantly impacting the work or social experience.
- Unique amenities or services that enhance the user experience, such as pet-friendly policies, variety in beverage options (e.g., different types of milk, matcha, chai), or the availability of water and snacks.

In summary, users seek a balance between functional work requirements and a comfortable, engaging social environment. The ideal space would offer the necessary infrastructure for productivity, such as reliable Wi-Fi and power access, while also fostering a welcoming and adaptable atmosphere that encourages both individual and collaborative engagements. Additional amenities and thoughtful services can further enhance the user experience, making the space a preferred choice for diverse activities.

Need 1: For users it is essential to have somewhere to be able to look for the offer of places.

Need 2: Users need to know what each place offers and their policies.

Need 3: Users want to know other people's opinion to be sure of what they are choosing.

Finding 1: Although users choose a place, if they see a review where they mention a bad thing about their primary requirements they may change their mind.

Finding 2: Even though in theory users only need to check information on the website, they might read on social media posts, reviews and other sources to find out if the offer is real and exactly what they say.

Finding 3: Although users want to always have the best choice they can find, sometimes with the lack of options or availability they don't really mind about the type of place they are looking for and can change to others like libraries or parks.

1.4. Summary of interviews

1.4.1. Demographics

1.4.1.1. Question 1: What is your age?

All of our participants were between 23 to 27 years old.

1.4.1.2. Question 2: What gender do you identify with?

Both managers interviewed were female. Out of the remote workers, two were female and one male. Out of the students three were male and one female.

1.4.1.3. Question 3: What is your country of origin?

Our participants were from various different countries. Of the managers one was from Germany and one from Mexico. Out of the remote workers, one was from Germany, one from Mexico and one from Bulgaria. Out of the students three were Italian and one was Spanish.

1.4.1.4. Question 4: How many hours per week do you work/study remotely?

The managers reported to work remotely respectively 15h and 20h. Two of the remote workers worked 40h remotely and one worked 16h remotely. The students reported to respectively study 4h, 15h, 20h, and 10h remotely.

1.4.1.5. Question 5: What is your screen time for Phone/Computer per day?

The participants reported to have a screentime of between 1.5h to 10h on their phone only and a screentime of 2h to 10h on their pc only. Some participants reported their screen time combined and reported to be between 8h and 12h.

1.4.2. Remote workers/Students

1.4.2.1. Question 1: What is your personal experience with working/studying remotely?

The RemoteWorkers reported various experiences with remote working. They had different amounts of experiences ranging from 2 ½ years to ½ year. One of them had the opportunity to work remotely, while the other two required to work remotely, because they were working in foreign countries and studying in Madrid. For one of them this meant working with a 8 hour time difference, which meant for her to work at night rather than in the morning. The two students reported that managing the working schedule and university schedule posed a significant challenge.

Three out of the four students reported to have worked remotely as well as studied remotely. Student02 reported that he preferred remote studying, because it is more individual and makes collaboration in teams easier. Student02 pointed out that they loved studying remotely, because they lived in a big city and could avoid losing time commuting.

1.4.2.2. Question 2: Can you walk me through a usual day of yours when working/studying remotely?

The interviewees had different routines when it came to working/studying remotely. The remote workers who studied, their work schedule would revolve around their university schedule. The full time remote worker explained that he engaged in a lot of meetings in the morning and never went to the office, because all meetings would be held online as some people are never in the office. At his international company he rarely meets anyone in person, except for 1v1 meetings. But those 1v1 meetings do not have to happen at the office. He reported to have done them in public places like cafes before. This implies requirements for those cafes to enable good communication. RemoteWorker03 explained that she mainly worked from the university, to use time most efficiently or from home only if she doesn't have classes.

The students reported very different habits for studying remotely. Two out of the four students reported that they went outside of their home to study. Student01 reported that they would use whatsapp, to make plans with friends on where to study. Students02 explained that changing locations helped them to motivate themselves to start studying. The other 2 students did not indicate that they used places outside their home to study, but focused on methods and routines they adopted for self-organisation and mental health.

1.4.2.3. Question 3: What advantages/challenges have you experienced working remotely?

Five out of seven participants indicated advantages and disadvantages they experienced when studying remotely. The other two were focused on challenges only.

Five out of the seven students and remote workers expressed that they benefited from the flexibility that working/studying remotely induced. The two working students indicated that working remotely benefitted their ability to manage their university and work schedule. Other benefits that were voiced by individuals included being able to cook or take a shower during the working day, enjoying the comfort of your own space, spatial flexibility of team members, the ability to study at the park or with friends, and being able to work at your own pace. Three out of seven participants voiced concerns about the fact that their apartments did not appropriately accommodate their needs, because of bad wi-fi or living situations with roommates that made concentrating challenging. Another three out of seven indicated a feeling of social isolation and loneliness they experienced when working remotely. Two added that working at home impaired their work-life balance, one of them expressed a feeling of working all day, because there were no external constraints when working from home. Other challenges pointed out included difficulties to assess modalities of places outside the home, working in a different time-zone, working policies of cafes interfering with their work, going to a place and not finding space, and having to scout for cafes that fulfil requirements.

1.4.2.4.   Question 4: What device do you use to search for a place to study / work?

Three out of seven participants said that they would typically use their phone to search for places to study exclusively, while two indicated to use their laptop and 1 indicated to use both on occasion. One person did not indicate any device, but were among two people who said they used google maps for research.

1.4.2.5.   Question 5: Do you regularly follow your occupation in places outside your home and work/university?

Six out of seven participants indicated that they regularly worked or studied outside the home. RemoteWorker02 said that she likes to work from the library, but cannot take meetings there. Student01 did not usually go to cafes, but used university related spaces as two other participants.

1.4.2.6.   Question 6: Can you tell me how you find these places to work / study ?

The participants reported different habits to discover places to study. While all remote workers and two students used google maps or other search engines to find places to study or work, two participants said that they found places through wandering around, and three participants indicated to find places through recommendations of people they knew. Two participants found places through Blogs posts or social media of whom one person reported to actually call places he planned on visiting to find out more about policies and availability of space.

1.4.2.7.   Question 7: What factors influence your choice of location?

Three out of the seven participants reported that a good wi-fi connection was among their priorities. Two people said that the place has to be close to their apartment. Two people said they required energy outlets. Another two said they wanted the space to be quiet such that you could do calls, while one person said they preferred it if it was a bit

lively. Individual factors included policy, good reviews, the right food/drinks, spaciousness.

1.4.2.8. Question 8: What specific amenities or facilities are important to you when selecting a location to work or study?

Seven out of seven participants said that the place needs to have wifi. Four out of seven participants said that they look for a level of comfort, they generally want to enjoy the place in general. Four participants also think it is nice if they have tasty drinks and food. Some participants could stay for quite some time so two of them mentioned a space to be able to rest apart from the study section. One of the participants mentioned the importance of the temperature of the place.

1.4.2.9. Question 9: Are you satisfied with your current selection? If not, what qualities are you missing?

Four of the seven participants indicated they were not entirely satisfied with their current selection. Out of the other three, one person said he had a big selection of appropriate places and another that he was happy with the space their university provided. Three participants indicated that places they used were too busy. Two added that especially on the weekend the places he liked didn't accommodate space for laptop users. One participant complained that the spaces his university provides do not always provide opportunities to eat. Another was bothered by the fact that he had to check places to see if there was space and had to go looking for another if it was too crowded. RemoteWorker01 indicated that he liked the places he was using, but would enjoy a Phone/Quiet booth that he could reserve for upcoming meetings.

1.4.2.10. Question 10: What are the biggest challenges you have faced when trying to find places outside your home/office to follow your occupation?

Three out of seven participants reported that they disliked commuting to places and only noticing there, that it was full. This would mean they would have to go through the process of finding a place again. Two participants complained that it was difficult to find places nearby. Individual participants remarked that they found it challenging to find out about opening times, found places too loud and had to resort to parks for work, feeling not welcome and having to pay for access.

1.4.2.11. Question 11: How do you typically access information about potential places to work or study?

Out of the 7 participants, 4 reported that they got information through word of mouth. Two used information provided by google maps. Two said they used articles to assess information and another two said they found information on instagram. Two went through their university to find out about places that the university provides. Only RemoteWorker01 said he would call, because the google reviews he checked often did not provide sufficient information about time the place gets busy and what the exact policies are. The waiters answering the phone could always provide detailed and accurate information. Further he explained that policies often prevented him from working, because the cafe struggled to monetize people working on laptops. This irritated him, because he would be willing to pay extra just to work. Some cafes he

found while travelling offered a premium service, where he would pay a one time free of 15 euros and would know he could spend the day and not bother anyone. He also remarked that cafes need better ways to communicate their specific expectations of customers.

1.4.2.12.   Question 12:What is your interaction with other people in these places?

Out of the 7 participants, 4 indicated that they do not usually interact with people in the workspaces they study at. If they did, they would interact with the staff to inquire about wi-fi and laptop tables. Two of the students reported that they would only interact with the friends they met for studying, but not as much with the other customers of the establishment. Only Student02 reported that they liked to engage in small chats at the bar and have even made some friends through these interactions. They noted that the environment was important for this and that bars provided a better atmosphere for interaction. Students01 reported that they preferred having a separate table for working and to be more isolated from other customers.

1.4.3.   Manager Questions

1.4.3.1.   Question 1: Can you describe your establishment and what kind of services you provide?

The two managers we interviewed worked in a cafe/bar in Berlin and a hotel in Austin,TX. The Cafe in Berlin was focused on providing food and drinks for mainly regular customers and also provided a cultural space for concerts, reading, and private parties. The hotel in Texas is focused on providing americana international food for business people who it accommodated.

1.4.3.2.   Question 2: What does your usual working day look like?

The two managers reported very different day to day activities. While the manager from Texas was focused on preparing the daily business and supporting customers with their individual wishes, the manager of the cafe was involved in more organisational tasks, such as checking emails, working on event leads, and preparing events.

1.4.3.3.   Question 3: How would you describe the customers that your establishment serves?

The customer base the two managers reported to serve differed greatly. While the cafe in Berlin was serving mainly urban Berliners in their 20ies to 30ies with established jobs, the Hotel in Texas was mainly serving middle-class American workers and parents of students. Many of their customers were attending conventions at the nearby convention centre.

1.4.3.4.   Question 4: Do you use the Internet to market your business? If so - how do you do it?

While the manager from Berlin reported to use Squarespace and Webflow for their website, they also wrote a newsletter and got referred through word of mouth. The manager from Austin reported that he was not as involved in the marketing of his business, but that they used reviews and comments of customers to make new arrangements. Their most important source for marketing was OpenTable.

1.4.3.5.   Question 5: Do you use any social media accounts for this?

Both managers reported that their business utilised Instagram for social media marketing. The manager from Austin added that they build their own website to attract new customers.

1.4.3.6.   Question 6: How do you feel about people working on their laptops here?

When asked about attitudes towards people working on laptops they gave differing answers. The manager from Berlin reported that people working on laptops were generally accepted and their establishment did not have any policy. Not too many customers used laptops, because the space didn't accommodate a lot of outlets and because the space is a bit hidden. But laptop users are not a target group, because they do not drive revenue. The manager from Austin reported negative encounters with customers, because they used their space to attend meetings. When disturbing them they were not happy. He kept an eye on them, but they would just have toast or a coffee. Generally his attitude towards people working on laptops did not seem to be good.

1.4.3.7.   Question 7: How do you communicate the rules for working on laptops in this place?

Both establishments reported that they had no policy for laptop work. The manager from Austin reported that he had to throw out people, if their presence interfered with their ability to serve other customers. He would go up to them and tell them they couldn't stay.

1.4.3.8.   Question 8: What factors do you believe contribute to the appeal of your coffee shop as a study/work space?

Other managers reported their spaces afforded working on a laptop, because they were quiet places. The cafe in Berlin was located in a park and the manager reported it to have a cosy vibe. However, she noted that the lack of outlets was a problem and did not accommodate many seats that could be used for remote work. The manager from Austin explained that their space was rather small and remote workers were not welcome to stay for too long.

1.4.3.9.   Question 9: Are there specific times or days when the coffee shop is more conducive to study or remote work?

The manager from Berlin reported that they had more people working on laptops during the week than during the weekend. Their establishment only opened at 12:00 and most remote workers would stay between 2pm-6pm. The manager from Austin reported different times when their place was most busy. Their business was most filled during the high season, between September and December and least busy between December and March. On a day to day they had most laptop customers between 8am-11am and 6pm-8pm. There was no pattern he could recognize between different week days.

2. User analysis (personas)

We created three different user personas based on the targets we interviewed and ran the contextual analysis through: students, remote workers and bar owners.

2.1. Persona 1: Jason

The Persona	
Picture	
Name	Jason
Short descriptor	Jason is a student at a technical university. He likes to meet at cafes to do group work with his friends.
Actions, motivations, and pains	
What do I do?	I study and work on assignments in public bars. Because I study a technical subject I engage in a lot of independent study.
Why do I do it?	I struggle to focus at home and live in a shared apartment. Getting out of the house makes focusing easier.
What do I want?	I want a lively place, where I can study, but also have fun. I don't want to lose time while looking for a place to study.

What's stopping me?	Especially on the weekend places are busy and policies vary. Committing to going outside can lead to a long search for a place to study.
Values	
What convinces me?	Cheap prices, good food and a good atmosphere.
What or who informs me?	I get most of my information from peers, save places to google maps, and check their information once I am looking for a place to go.
Context	
Where am I?	Usually, I do work after my classes are finished, so I use my computer during class to research places that me and my friends go to later.
What's my day-to-day?	My life revolves around my hobbies and university. In the morning I create a to-do list for the day. My schedule is very inconsistent and every day is different. Most days I have classes, do some independent study, and meet friends for leisure activities. Some days I do sports. I use my free time on weekends to study.

2.2.   Persona 2: Britney

The Persona	
Picture	
Name	Britney
Short descriptor	Britney is a working professional at a modern company. She enjoys working remotely because it gives her flexibility to work from anywhere and saves time.
Actions, motivations, and pains	
What do I do?	I work remotely from cafes and co-working places. I have to attend a lot of meetings.
Why do I do it?	I want to avoid wasting time commuting if I work from the PC anyways. But working at home can be dull and it is difficult not to get distracted if I don't change location.
What do I want?	I want a quiet place, where I can take meetings. I need a reliable workplace, because I have responsibilities and a tight schedule. Therefore, I am willing to pay extra for places that provide me with premium experiences.

What's stopping me?	Sometimes there is no space at working cafes. And sometimes cafes market themselves as co-working spaces, but get passive aggressive when you don't order regularly. But I can only drink so much coffee.
Values	
What convinces me?	A quiet place, that is reliable, has transparent policies and that gives me the feeling that I am welcome.
What or who informs me?	I research places on the internet, because I need a place close to my home. I find places through blog articles and check them out on google maps. If information is not readily available I call the place, because I cannot afford wasting time.
Context	
Where am I?	I am at home and check places out on my phone.
What's my day-to-day?	I work during the week(9-5) and spend my time on leisure activities on the weekend. I have a lot of meetings during the day.

2.3.   Persona 3: Ahmed

The Persona	
Picture	
Name	Ahmed
Short descriptor	Ahmed owns a medium-sized coffee shop that sells coffee, pastries, and lunch. Since the pandemic, more people use it to work on laptops. This poses new challenges.
Actions, motivations, and pains	
What do I do?	I try to make my business as profitable as possible. We provide wifi and laptop tables for our customers, because all our competitors do it. We use the internet to communicate this.
Why do I do it?	Laptop users have become a large customer base for cafes. We do not want to miss out on that.
What do I want?	I want to maximise profits during peak times such as lunch and after work. At the same time, I want to make some money the rest of the day.
What's stopping me?	Outside of our peak times, we mainly have customers working on their computers. If they stay throughout lunchtime we miss out

	on our most profitable customers. However, I would like to fill my place outside of peak times, but struggle to monetize laptop customers and impose policies that constrain them.
Values	
What convinces me?	Anything that is good for my business. I want to make maximum profits during all times of the day, week, and year.
What or who informs me?	I compare my business to my competitors.
Context	
Where am I?	At work most of the time, managing stuff from my PC some of the time.
What's my day-to-day?	I spend some time in my cafe and the rest managing stuff using my PC. Paying bills, organising events, hiring staff, and so on. Sometimes we do events, which require a lot of preparation.

3. Task analysis

3.1. Task list
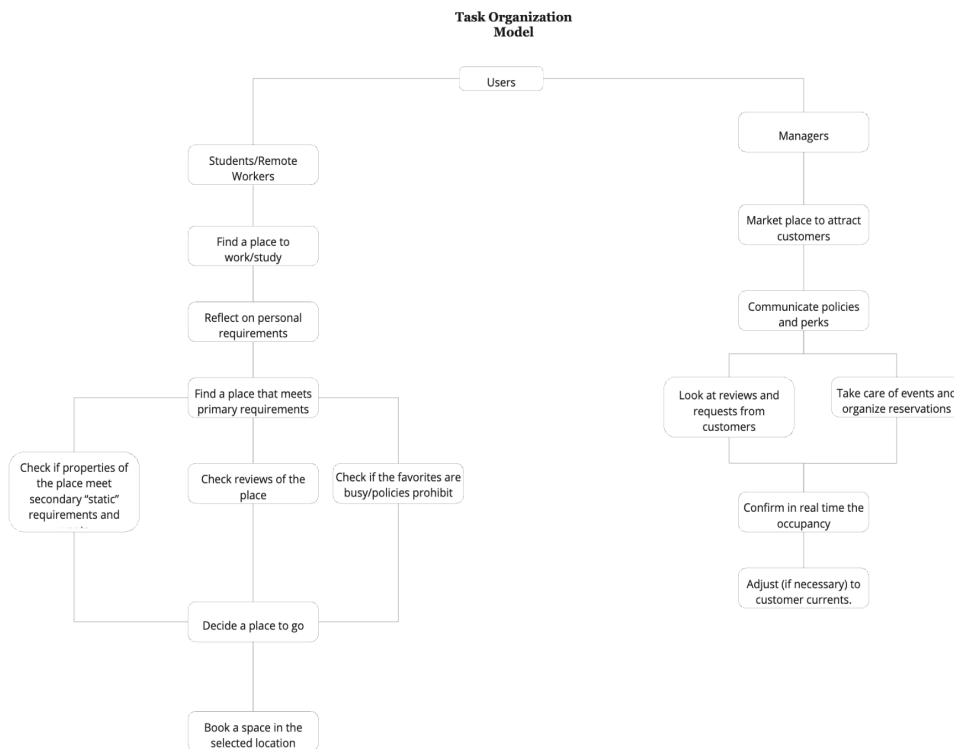
Task Students/Remote Workers	Description
Find a place to study/work	To find a place people need to decide which is the best way to look for something, is it social media, maps, call a friend, remember a recommendation, ask someone in the street?
Reflect on personal requirements	Before making a decision on where to go, the users need to think about what they are looking for. Is it a place that needs to be completely quiet, have food or just drinks, nearby, or does it matter?
Find a place that meets primary requirements	The primary requirements are everything that has to do with the general description of a place and the basic needs and wants of the user. Location, amenities, ambiance, quietness, cost, internet connectivity...
Check if properties of the place meet secondary "static" requirements and wants	After doing that first filter, users will have to select a place to go, but first they must select the one that aligns more with them in their personal preference. Food and drinks quality, seating preference, lighting, temperature, decoration, social interaction, personal experience...
Check reviews of the place	The reviews are a great place to see opinions of users that have been there recently and confirm the information given by the cafe. Mainly you can see the pictures taken by other users, filter the reviews to see if the policies they say are true and implemented, and dive deep into specifics.
Check if the favourites are busy/policies prohibit working (dynamic requirements)	Being able to check the availability is very important for users as that might determine if it is a good place to go or consider their needs at a certain time, day, or week.
Select a place to go	After searching lots of different places the users have to select one option, all of the previous factors will be considered and taken into account for the final decision.

Be able to book your space in the selected location	To prevent getting there and having to go back and repeat all the process done because there was no place available, booking a space for a certain time is a good way to secure your place.

Task Managers	Description
Marketing your place to attract customers	Managers are very interested in attracting more people to their business, they always try to reach more and more people by checking daily their mails, reviews, social media and anything upcoming regarding customers and events.
Communicate policies and perks(what makes the place good)	The policies regarding laptops are very important as not all cafes want people staying 2+ hours only consuming a coffee when they can have customers coming in for less time and more spending. When they are clear and efficiently communicate this, they don't need to confront people.
Adjust to customer currents (summer vs winter, lunch vs dinner) and time frames	There are always periods where business is super good or not as good, seasons have a great impact on that so being able to adjust the rules into what the customers are currently experiencing and communicating that effectively is a great skill.* (Opportunity to monetize in difficult times with workers/students)
Review changes and requests from customers	Listening to the customers is a great tool to have feedback and see what customers really think. When it's good it is beneficial but when enough bad ones appear, a plan can be made.
Confirm in real time the occupancy	Very important to communicate to customers when business is slow, not available (because of an event or reservation), or when it's full and harder to accept new customers.

3.2.   Task organisation model

Task organisation model can be expected using the following link.

Task Organization
Model

Users

Students/Remote
Workers

Find a place to
work/study

Reflect on personal
requirements

Find a place that meets
primary requirements

Check if properties of
the place meet
secondary "static"
requirements and

Check reviews of the
place

Check if the favorites are
busy/policies prohibit

Decide a place to go

Book a space in the
selected location

Managers

Market place to attract
customers

Communicate policies
and perks

Look at reviews and
requests from
customers

Take care of events and
organize reservations

Confirm in real time the
occupancy

Adjust (if necessary) to
customer currents.

miro

The task organisation model explains the general scope of tasks for each user, on the left side for students and remote workers that although they are different profiles looking for different things and have a mix of preferences, they are similar overall as customers.

For the managers it is not only about booking but it's also important to be able to reach their target sales and segment their customers for the overall goal of the business, as well as being able to take care of their daily tasks.

3.3. Task scenarios

Scenario 1 (Student) : Jason has a group project that has a due date for Sunday, it consists of doing a presentation for his class "Introduction to Design Methods" where they have to brainstorm a lot and debate between different ideas in order to choose one for their semester project. It is very important that they can meet Thursday or Friday to work on it. His team consists of four people and they will all have their computers with them so they can work on the presentation together and finish it. They want to search a place that is near the city centre as everyone lives in different areas and that is the middle location.As they plan to go after lunch and stay for a couple hours, they want to be able to have some drinks and snacks in the cafe and they don't want to spend more than 10 euros on this. They are also looking for a place that has wifi and big tables with plugs so they can sit together and talk about their project for a long time.

Scenario 2 (Worker) : Maria is looking for a new place to go as she is on vacation in Madrid for the next 2 weeks. She normally likes to have coffee and lunch, because she plans to stay a half or a full day of work in that place. She needs to have multiple meetings with clients from different countries so it's very important that she can hear them clearly and that whenever she answers the noise is minimal so the communication between them doesn't have any problems.

Scenario 3 (Manager) : Ahmed is looking to add new policies to his cafe regarding laptops on weekends, but he wants to make sure first what his competitors in the area are doing with this kind of policy. He is thinking that he could let laptop users work in the morning for a couple hours because the business has a slow flow during that time, but he doesn't want to miss out on the lunch customers as they are the most profitable ones. He wants to communicate this easily to the most people he can through different channels and wants people that come in to know the rules very well so the employees don't need to kick anyone out. He would also like to concentrate on the reviews and DM they have on social media so that he can fix the problems bad reviews mention for the different types of customers that go into his cafe.

4.   Environment analysis

Social environment	From the user research, we know that 100% of the target users analysed, searching for a working/studying place individually. So our system is expected to be used only individually. We also know that people search for places to do group work, so users need to be able to research as a group while maintaining individual use. The users analysed put a strong emphasis on the importance of recommendations (reviews, word of mouth, social network, universities, friends). We know that 100% of our users found them very important. Also we found out that 43% of users enjoy meeting new people and friends in studying places. So, combining these two social aspects, we know that our users need precise feedback and recommendations about every place, creating a students and workers social network offering the possibility to exchange information about places and to connect with each other.
Operational risks	We consider an operational risk anything that impedes the users to complete their task of studying and working in public places. For the 100% of our interviewees it is important that the place is close to them and that it allows laptops and has Wi-Fi connection. In the contextual inquiries we saw for every user (100% of them) that it is not easy from the actual system to find this information (except from the distance, thanks to Google Maps). Another high

	operational risk, stated by 50% of users, is the risk of finding full places that lead to a big waste of time.
	All this missing and confused information about the places' policy and places' features, can have the consequences of wasting studying and working time or to undermine the quality of it for our target users.
Technological environment	With the actual system, we know that to perform the task of searching a place to study or work, 57% of our interviewees use smartphones, and the remaining 43% use laptops. Since our users use the system everywhere with no restriction, the system should maintain this flexibility. Considering that nowadays, everybody has a smartphone, a mobile app is the most flexible system we could use. The softwares used now by our target users are Google Maps (100%), Google search engine (71%) and Instagram (43%). For everyone it is important to rely on reviews and recommendations and on pictures of the places. So an internet connection, either if they are using a laptop or a smartphone, is mandatory. Considering that 57% of interviewees complained about places' policy regarding the usage of laptops, it is possible that they will find themselves in places where they cannot use them. So, in these cases, for laptop users (43%), if they need to search for another place, the only option they have is to use their smartphone. This, again, pushes our decision towards a flexible mobile app.
Physical environment	Our users will use the system everywhere, they can be at home, at university, they can be at a working space, they can use it while walking towards another place. Considering this, our users need a flexible system available anytime and anywhere with no restriction about the physical environment.

5.   User Journey Maps

User Journey Maps can be expected using the following link.
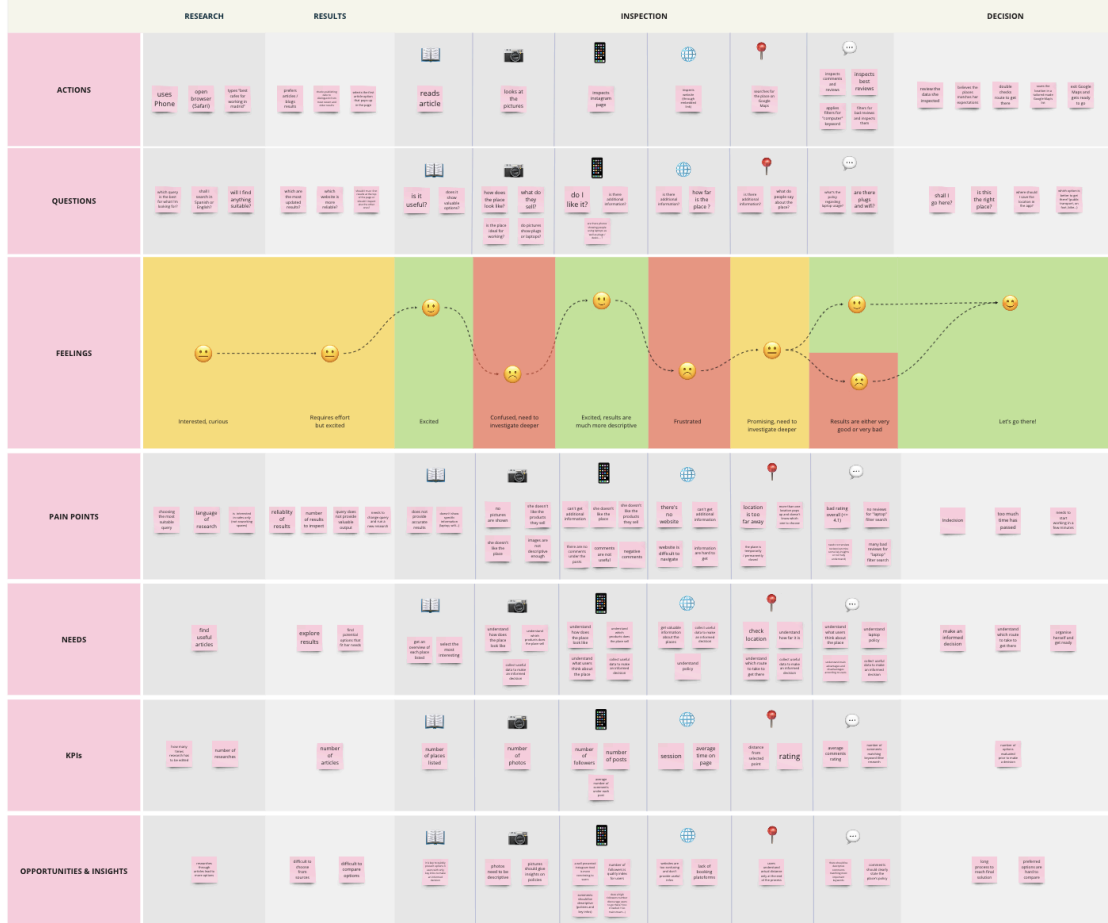
USER SCENARIO

Britney is a working professional at a modern company. She enjoys working remotely because it gives her flexibility to work from anywhere and saves time. Since working at home can be dull and it is difficult not to get distracted if she doesn't change location, she is looking for a place which is quiet - so that she can take meetings - and reliable, because she has responsibilities and a tight schedule.
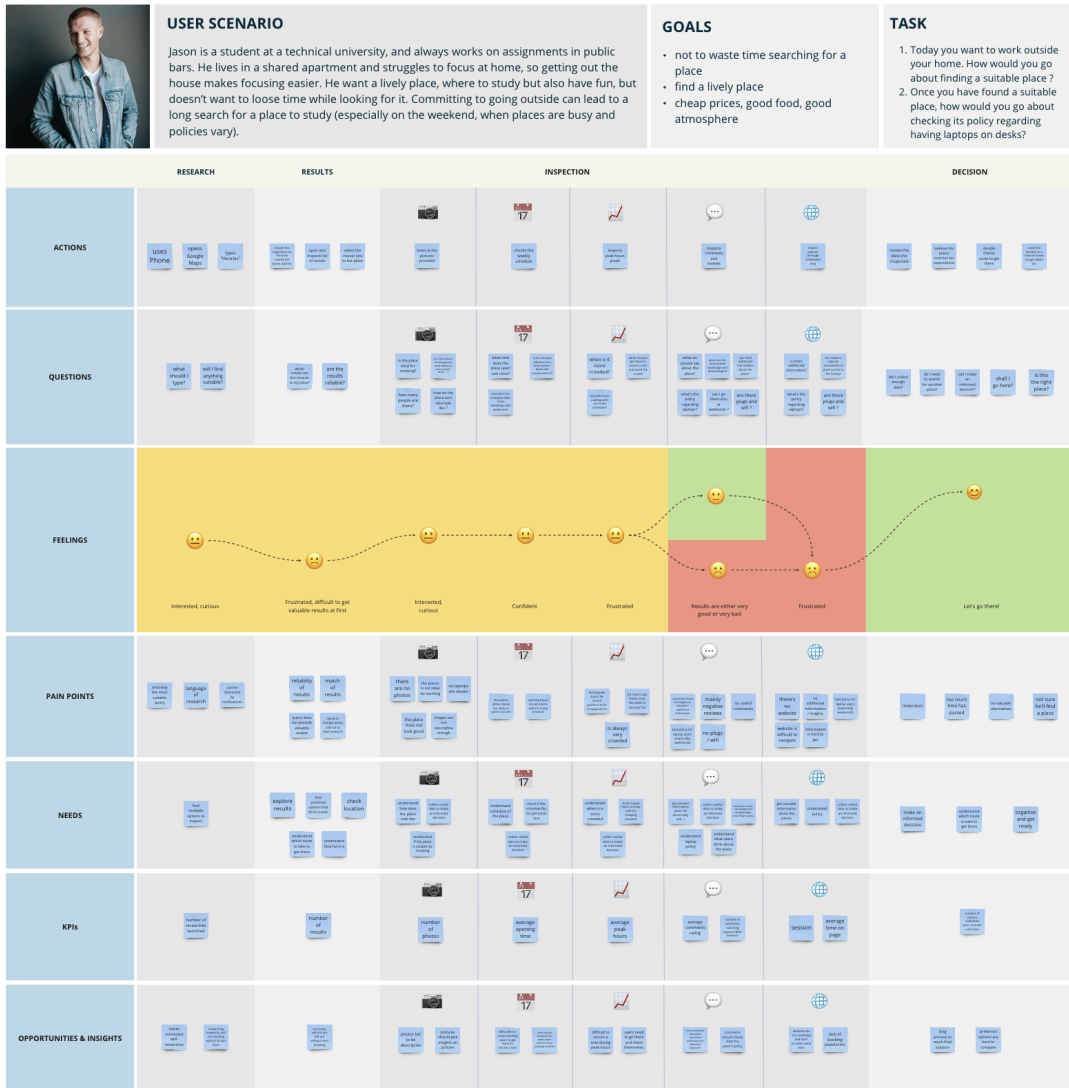
GOALS

- not waste time commuting
- finding a quiet and reliable place
- transparent policies for workers
- place close to home

TASKS

1. Today you want to work outside your home. How would you go about finding a suitable place?
2. Once you have found a suitable place, how would you go about checking its policy regarding having laptops on desks?

	RESEARCH	RESULTS	INSPECTION						DECISION
ACTIONS	uses Phone; open browser (Safari)	prefers articles/blogs/results	reads article	looks at the pictures	inspects instagram page		search for the place on Google Maps	inspects comments and reviews	checks and inspects
QUESTIONS	which query in the best for what I'm looking for?	will I find anything suitable?	is it useful?	how does the place look like? / what do they sell?	do I like it?	is there additional information?	how far is the place?	what do people say about the place?	shall I go here? / is this the right place?
FEELINGS	Interested, curious	Requires effort but excited	Excited	Confused, need to investigate deeper	Excited, results are much more descriptive	Frustrated	Promising, need to investigate deeper	Results are either very good or very bad	Let's go there!
PAIN POINTS	choosing the most suitable query; language of research	reliability of results; number of results to inspect	does not provide accurate results	no pictures are shown; she doesn't like the place	can't get additional information	there's no website; website is difficult to navigate	location is too far away	bad rating overall (ex: 4.1); no reviews for "laptop" filter search	indecision; too much time has passed
NEEDS	find useful articles	explore results	get an overview of each place	understand how does the place look like	understand how does the place look like	get valuable information about the place	check location / understand how far it is	understand what users think about the place	make an informed decision
KPIs	how many times research tab is visited; number of researches	number of articles	number of places listed	number of photos	number of followers / number of posts	session / average time on page	distance from selected point / rating	average comments rating	
OPPORTUNITIES & INSIGHTS		difficult to choose from sources; difficult to compare options		photos need to be descriptive	pictures should give insight on policies	websites are too confusing to navigate; lack of booking platforms	open websites should clearly state the place's policy		easy process to reach final solution; preferred options are better to compare

6. Annex A: gathered data

Demographics

Question 1: What is your age?

Manager01	27
Manager02	25
RemoteWorker01	27
RemoteWorker02	24
RemoteWorker03	25
Student01	23

Student02	26
Student03	23
Student04	24

Question 2: What gender do you identify with?

Manager01	Female
Manager02	Female
RemoteWorker01	Male
RemoteWorker02	Female
RemoteWorker03	Female
Student01	Male
Student02	Male
Student03	Female
Student04	Male

Question 3: What is your country of origin?

Manager01	Germany
Manager02	Mexico
RemoteWorker01	Germany
RemoteWorker02	Mexico
RemoteWorker03	Bulgaria
Student01	Spain
Student02	Italy
Student03	Italy
Student04	Italy

Question 4: How many hours per week do you work/study remotely?

Manager01	15h
Manager02	20h
RemoteWorker01	40h
RemoteWorker02	16h
RemoteWorker03	40h
Student01	4h
Student02	15h
Student03	20h
Student04	10h

Question 5: What is your screen time for Phone/Computer per day?

Manager01	1.5h/7h
Manager02	9h
RemoteWorker01	2h/8h
RemoteWorker02	8h
RemoteWorker03	10h/10h
Student01	3h/9h
Student02	2h/2h
Student03	12h
Student04	5h 24min/2h 53min

Remote workers/Students

Question 1: What is your personal experience with working/studying remotely?

RemoteWorker01	• Works remotely for 2 ½ years • Used to go to the office, but does not see reason • Sometimes from berlin and sometimes for abroad • Due to pandemic • 90% remote
RemoteWorker02	• Since September her work has been more challenging because she works in Mexico. • Time difference is 8 hours so she needs to work until late at night (Madrid time). • Her work is project-based so if she organises her work and meetings it's manageable. • Her clients know she is remote and in Spain. 1) Follow-up question: How do you manage your time? • Not super good • Organises around study schedule • Works after classes • Dependent on current projects
RemoteWorker03	• Organized • Days 4 working and studying • Working remotely • Overall difficult
Student01	• Last year he worked full time as a UI designer. • In a big city it is harder to move so everything is almost online for meetings. • Loves working remote because he prefers not to commute.
Student02	• Did both • Easier studying remotely because it is more individual and work more with teams • Difficult to ask for clarifications in work remotely (difficult communication)
Student03	• Studying remotely during university (5 years)
Student04	• More study than work • More since covid

Question 2: Can you walk me through a usual day of yours when working/studying remotely?

RemoteWorker01	- Gets up 8:30 - 9 - First email and coffee - A lot of meetings people need to be briefed - Meetings at 10am - till afternoon - Writing and documentation in between - Meetings are best remote - Works in Zoom meetings most of the time, even from the office - Never everyone is at the office - International company - Rarely meetings in person. Only 1v1. Which is preferred - Has had 1v1 in public spaces before. - The coffee shop needs to be not too loud for this. - Meetings might be confidential - Most of the time already know the places
RemoteWorker02	- Depends on class schedules - Usually messy and she needs to use her free time to work.
RemoteWorker03	- Wakes up early - Comes here at 8/8:30 - Daily meetings - Switches rooms - University or home for working - Works mainly at uni (if she has lectures) - If not, only at home
Student01	- Decides in a chat (Whatsapp) when to have meetings. - Prepares headphones and everything necessary before connecting.
Student02	- Wake up in the morning - If can work at the place he stays there - Outside place, shared - Depends on the tasks but usually prefer places where can talk loudly - Difficult of staying at home is people around - Lack of motivation / need for motivation (motivation comes from studying outside?)

Student03	- Wakes up early - Try to do some sport (not look at screen) 10/11 am starts working - Does some breaks for eating, exposing to sunlight - Stops around 20/21
Student04	- first: to-do list review - then: attend lesson - start working on assignments

Question 3: What advantages/challenges have you experienced working remotely?

RemoteWorker01	- Connection might not be stable - Too loud - Don't know policy - There is a challenge to research fulfilment of personal requirements.
RemoteWorker02	- Gave her more freedom, eg: she went to Fuerteventura for 1 week. - More time independence to organise her hours with school. - Being in a different time zone is surely a challenge. - She doesn't like to be home all the time so she needs to search where she can go.
RemoteWorker03	Advantages: - Flexibility - Can plan other tasks - Cannot do other tasks at the office (cook, take a shower...) - She can study and work (big plus) - Integration Challenges: - Shared apartment - No separate rooms for working - No separation between environments - Remote work is mixed (work life and private life are the same, everything happen in the same room... once she's done with work she still thinks about it, there's no differentiation) - She doesn't have much space at home
Student01	Very flexible

	• Very easy (just link and join). • Internet connection is a challenge. • He likes to have his private space so he likes that. • Likes that team members can connect from anywhere (even on trains, airports,etc).
Student02	• Benefit: manage timeline • Go at his pace, no rush • Challenges • No time to take break • Work until the task is finish, not when the day is over • Responsability • No timetable respected • Communication disadvantages
Student03	Advantages: • Change place • Study w friends and new people • Study at the park (sunlight) • Right environment = more productive • Flexibility Challenges: • Gets boring • Gets lonely • Gets depressing • Not all the places are a good fit (connection...) • Not always available
Student04	7. Wifi didn't work at home 8. Had to go out just to check all emails and communication 9. Had to scout for cafes/coworking spaces 10. Might not have space at library/cafe . Sometimes cafe policies disrupt work 2. Difficult for plan for, because tasks can take longer than expected

Question 4: What device do you use to search for a place to study / work?

RemoteWorker01	• Phone

RemoteWorker02	- Notebook - Laptop
RemoteWorker03	- Google - Google maps - Usually searches for a place during group works or travelling and needs to work - Types Coworking cafes / spaces / cafes
Student01	- Smartphone - He has a tablet and laptop but it's easier on a smartphone.
Student02	- Laptop - No phone - Mostly find place from his network (colleagues)
Student03	- Laptop - People (network) - Asks people - Simple query using search engine - Searches in University website
Student04	- Phone - google maps - browser

Question 5: Do you regularly follow your occupation in places outside your home and work/university?

RemoteWorker01	
RemoteWorker02	- Works at libraries but can't have her meeting there. - Likes to take meetings in parks if she wants to enjoy the day after it. - Cafes when she works more time.
RemoteWorker02	Yes, usually works at cafes/study and working environments at uni (Imdea)/home
Student01	- Doesn't usually go to cafes. - Goes to Imdea (Eit library). - Cafes close to home
Student02	Yes (Very sure ("absolutely"))

Student03	● Yes ● She needs to see people
Student04	● Sometimes

Question 6: Can you tell me how you find these places to work / study ?

RemoteWorker01	● Google reviews ● Calls them directly ● Asks about the requirements ● Blog posts
RemoteWorker02	● Social Media ● Wandering ● Google Maps
RemoteWorker03	● Keywords searching through Google Maps or Internet
Student01	● Imdea (teacher told him) ● He went to eat in a bar and noticed a bigger room to study
Student02	● Public facilities, e.g. libraries, universities rooms ● Used to this process since high school,especially for meetings with colleagues
Student03	● Asks people ● Simple query using search engine ● Searches in University website ● Instagram pages (student associations, searching with #)
Student04	● Google maps/browser ● Sometimes ask friends ● knowledge of the city and recommendations

Question 7: What factors influence your choice of location?

RemoteWorker01	
RemoteWorker02	● Whatever is closer. ● Depends what work she needs to do. ● If there's a toilet, food, tables.

RemoteWorker03	- Stable wifi connection - If allows laptops (especially during weekends) - Choices for eating and drinking - Outlets for chargers - Starring (reviews)
Student01	- Not very crowded (social anxiety) - Quiet - Enough space - Basic equipment (chair, desk) - Sufficient space to work
Student02	- Depends on tasks: silence (individual study), place where they can speak (work groups) - Connection (wifi) - Electricity (computer)
Student03	- People she knows go there - Close to her place - Nice place (connection, plugs, sunlight)
Student04	- Wi-fi (has to be fast) - Not too quiet - Bar > Library

Question 8: What specific amenities or facilities are important to you when selecting a location to work or study?

RemoteWorker01	- Enjoy the place - Nice coffee - Good food - Terrace - Spacious and quiet - Ability to do video call (background) - Own space
RemoteWorker02	If there's a toilet, food, tables.
RemoteWorker03	Places to sit
Student01	- Cares about comfort. - Wifi (but he doesn't use public wifi because he cannot trust it) - Mobile network and data. - Temperature in the room (climate comfort)

	● Follow-up question: Do you prefer cold or hot rooms? ● Colder rather than warmer but balanced
Student02	● Mostly bar, pubs where you find people and you can drink and eat ● Aggregation (network)
Student03	● Enough space between people ● Plugs, wifi … ● Vending Machine (coffee) ● Water dispenser -> Gesture for refilling water bottle
Student04	● Brake location for coffee/smoke ● Plugs for phone ● Wi-fi ● "Room to breathe" not to close with other students

Question 9: Are you satisfied with your current selection? If not, what qualities are you missing?

RemoteWorker01	● Phone booth ● Quiet booth
RemoteWorker02	● Retiro ● Santander working coffees
RemoteWorker03	● Yes ● Lots of choices ● Weekend issues (mainly group works)
Student01	● Has all the amenities in IMDEA, perfect study ambiance. ● ● He spends more time there because the quality is good. ● ● Couldn't think of anything specifically for cafes.
Student02	● Didn't went to lot of places ● Study room at uni ● Coffee Shop (for group works) ● They lack an Easier access to a place like a cafeteria ● Found similarities with italian places for the universities rooms ● Important to have drinks and food in places (automatic machines are not
Student03	● Not satisfied here in Madrid

	• Very hard to find a place she likes • Lots of people, super busy • Coffee places don't allow you to stay during weekends
Student04	• Super crowded • 1h que • has to check manually • goes back home

Question 10: What are the biggest challenges you have faced when trying to find places outside your home/office to follow your occupation?

RemoteWorker01	
RemoteWorker02	• Feeling not welcome to work there with a laptop. • Places are full and loud, she can't really do anything about it. • Has to move to parks or quiet places.
RemoteWorker03	• Opening hours
Student01	• Haven't really looked for anything new
Student02	• Closeness to home (30 min with public transport / 20 min on foot) • No paying to enter the place (importance of economic motivation) • He is willing to pay for consumption of drinks and food but not just for the access • Importance of good place (young people, beautiful women) • Easy reach • Free entrance to places • Importance of people around him (beautiful presence) • Easy reach places (geographical motivation) <20 min by foot • <30 by public transport.
Student03	• Be sure that you can find a seat there
Student04	• Having to check manually and lacking alternatives • Going through the same process again

Question 11: How do you typically access information about potential places to work or study?

RemoteWorker01	- Calling - Is it quiet? - What time does it get busy? - Google information is not satisfactory - Reviews are good - Often he goes to places to work, but only finds out that they have conflicting policies there. - Some "working coffees" only have one laptop table. - Policy about working times is not transparent. - Challenge to monetize coffee shops. Lack of opportunity to pay for work. "You can only drink to much coffee" - Sometimes you pay 15$ for the whole day, for premium services. - There needs to be a way to communicate the expectations of customers. - Some coffees use wifi codes to constrain the customer's time spent.
RemoteWorker02	- Google Maps - The place depends on what is closer at the moment. - Search "work cafe" "Go and see" - If several places are full she goes to the park or back home
RemoteWorker03	- Google Maps - Articles on web - She copy paste location she finds online in Google Maps Decision based on: - Distance - Ratings - Laptops policy - Reels on IG - Word of mouth
Student01	- Looked for study rooms -> Checked at the schedule (wanted to go late at night, wanted to search for a 24h open study room) - Zoomed out (on the map) in his area - Looked for the closer space - Laptop weighs so he prepares everything before going.
Student02	Speaking with colleagues and friends

	- Asking to university (is there some connection?) - Feature from university to help students find places to study
Student03	- Asks people - Simple query using search engine - Searches in University website - Instagram pages (student associations, searching with #)
Student04	- search by keywords first - blogs

Question 12: What is your interaction with other people in these places?

RemoteWorker01	Does not interact
RemoteWorker02	No interaction
RemoteWorker03	- Not really a lot of interaction - Interacts with staff - Asks if a table is free - Asks for wifi - People are mainly working - She doesn't really have time to interact (mainly working)
Student01	- Doesn't want interaction. - Wants to focus. - Even though he's alone he can also get distracted. - Follow-up Question: Would you be more comfortable about having a separate desk or sitting at a table with more people? - Prefers being on his own, isolated. - At libraries, he prefers single desks because he likes it. Even though usually more people don't really affects in his performance, but finds that when other people talk he gets distracted at moments.
Student02	- Small chat (at the bar) - Talks in breaks and after the study session (grab a beer). - Coffee breaks, eat breaks. - Break when tired, overwhelmed. Take break to rest - He found new friends there in the past - Smile -> seems he likes this argument. - Importance of bar environment.

Student03	- Goes w/ friends - Place where you drink coffee and have small chats during breaks (mainly w friends)
Student04	eating with friends

Manager Questions

Question 1: Can you describe your establishment and what kind of services you provide?

Manager01	cafe/bar in Berlin Providing food/drinks Cultural space in neukölln Berlin for concerts, readings, and private parties/dinners/parties
Manager02	Business Hotel in Austin Space for Business travel American international food Not buffet Menu service

Question 2: What does your usual working day look like?

Manager01	Checking emails Checking event management leads Check meetings Prep events
Manager02	Work in the morning, 7am, Get prepared whenever customers come, serve them drinks, explain about the menu, care about allergies preferences,

	give recommendations, serve them, talk to them, give info about the hotel and area

Question 3: How would you describe the customers that your establishment serves?

Manager01	Age range end of 20ies to end of 30ies
	Older customers
	Urban Berliners with established jobs
	Not so many students
	Not super cheap -> older customers
Manager02	Most of them middle-class american workers
	Parents of students
	Business men-women
	People that go to the convention center nearby

Question 4: Do you use the Internet to market your business? If so - how do you do it?

Manager01	Squarespace /Webflow for website
	Newsletter
	Recommendations
Manager02	Not that involved
	Marketing and manager -> they make new arrangements because of comments and reviews of people that were in
	New chefs that want a new meal experience

	OpenTable very important for them

Question 5: Do you use any social media accounts for this?

Manager01	Instagram
Manager02	Instagram Website

Question 6: How do you feel about people working on their laptops here?

Manager01	Accepted No policy In winter there is little customers, because it is hidden -> not crowded(besides lunch) Not a target group, because no revenue
Manager02	Lots of them were not happy Didn't want to disturb them because they don't know if they are in meetings Don't want to interrupt Keep an eye on them but they just have coffee or a toast

Question 7: How do you communicate the rules for working on laptops in this place?

Manager01	No policy, has always worked out

Manager02	No policies
	But sometimes when there are a lot of people they tell them they can´t stay

Question 8: What factors do you believe contribute to the appeal of your coffee shop as a study/work space?

Manager01	Very calm
	Located in park
	No policy -> no problem
	Cozy
	The electricity infrastructure is not so good. (not many outlets)
Manager02	Quiet, peaceful
	But not a lot of spaces that they could be in for a long time

Question 9: Are there specific times or days when the coffee shop is more conducive to study or remote work?

Manager01	During the week rather than weekends
	In the afternoon (only opens at 12:00)
	From 2-6
Manager02	High season -> Same as american football, September - December
	Lowest season -> December - March
	Mornings: 8am - 11 am and afternoons:18-20 pm

	Week varies, no specific days

Contextual inquiry

Student01 - Task 1

Time	Steps
3.04 min	1. Open google maps 2. Looks for libraries near location 3. Enabled do not disturb mode 4. Chose one 5. Checks for photos (no) 6. Checks for website (no) 7. Moves to another one 8. Looks at the photos 9. Clicks one photo where temperature is shown (28 degrees, says wtf) 10. Checks peak hours in Google Maps features (info on how to plan to go there) 11. Checks schedule to see if it fits his study schedule 12. Check the website (is there additional information?) 13. Public library: is there any ID card to sign up for it? Or is it not compulsory? 14. He likes that one, he's still going to check others just in case he likes them 15. Skips one he just selected because it is not opened on saturday and sunday 16. He shifts to cafes studios (just cafes are cafeterias) 17. He checks photos 18. Saw a laptop 19. Clicks in the photo to inspect 20. Looks at peak hours 21. Looks at schedule 22. Surprised: opens earlier (7am) than study rooms and closes later (10pm) 23. Checks the websites 24. Does not get as much information as he needs 25. He needs to choose between these two 26. He will go for the library

	a. More space
	b. Saves it in google maps list
	c. Checks the location
	d. It's close enough
	e. No exam period during uni = there will be less people
	f. He wouldn't go at the end of the semester = very full

Student01 - Task 2

Time	Steps
3.56 min	1. Open Google Maps
	2. Goes back ti the place
	3. He assumes laptops are allowed (it's a library)
	4. He checks photos for laptops
	5. He sees them, good sign. Assumes it's allowed
	6. Goes to the website
	7. Services: WiFi. Assumes he's allowed to bring the laptop
	8. Goes to reviews
	9. Looks for the search field
	10. Looks for keyword (ordenador): nothing
	11. Tries with portatil: nothing
	12. Tries with device: app crashes
	13. Goes through first shown reviews to check if something useful is written
	14. Reads one in particular
	15. Laughs because one reviews says the place is too cold (in a funny way)
	16. Finds one talking about sockets and usb
	a. He's pretty sure he can bring it
	17. He'll go there and check

Student02 - Task 1

Time	Steps

3.32 min	1. Uses phone
	2. Goes to Google Maps
	3. Searches for "library"
	4. Goes to the centre of Madrid where he lives
	5. Sees there are some options
	6. Misleading, he knows that some are close (already been there)
	7. Searches again
	8. Selects a new library (Biblioteca istorica de marques)
	9. Photos: spaces where he can study
	10. Check schedule (open until…)
	11. Checks the comments
	12. New searches: student bar
	13. He doesn't like results, changes query: working coffee. More choices
	14. Chooses one coffee (behind the name there's written coworking
	15. sees the prices, menus, tables,,,,
	16. comments related to his search: the place fits his expectations
	17. decides to go there

Student02 - Task 2

Time	Steps
3.56 min	1. Uses phone
	2. Goes to Google Maps
	3. Goes to the menu
	4. Checks first review: says that the slots are not the best and there are policies regarding laptops
	5. He knows that tables will be different for pc and non pc users
	6. Searches keyword computer in reviews: no results
	7. Sees there's an ig page
	8. Checks it out
	9. He thinks he won't find anything there
	10. Doesn't find anything
	11. Searches through the comments again

	12. Reads one bad review (⅖) saying that tables are different, if you are not in a laptop user table you cannot work but there's no signage to tell you that, the waiter does that
	13. He has enough information to decide whether to go or not,he knows he can work there and that there are policies, he needs to ask the waiter. He would go

Remote worker01 - Task 1

Time	Steps
6.19 min	1. Open browser (safari)
	2. Wants to look cafes or restaurants
	a. "Best cafes for working in madrid"
	b. Not work in coworking spaces
	c.
	3. Prefers articles -> laptop cafes, more recommendations
	a. Not as accurate
	b. Not specific (laptops, wifi, seats?)
	4. Looks at pictures once she decides on one
	a. Looks up Instagram
	b. Mention the price
	c. Location
	5. Not really a coffee snob
	6. If she find something that she likes (pictures) she looks up the place
	7. Clicks on cafè federal
	8. Link to ig page
	9. Scrolls down
	10. Website
	a. doesn't find info in the website
	11. Looks on google maps
	12. Two location, choses the closest one
	13. Important : Review (4.1)
	14. Normally applies filter for computer
	15. Goes through reviews (translates them)

	16. Looks also at bad reviews
	17. Sees that they have bad reviews related to computers (usually bars only have a few)
	    a. Red flag: shifts to another bar for the research
	18. Goes back to website and article
	19. Selects a new one
	20. Checks instagram
	21. Goes to ig
	22. Same steps as before
	    a. Nice pics
	23. Goes to google maps , looks at the location
	24. Reviews
	25. Good reviews from people with laptops
	26. Chooses this one
	27. Goes to google map, search for address and checks route

Remote worker01 - Task 2

Time	Steps

2 min	1. Goes to google maps
	2. Tags in reviews
	3. Checks in cafes she already knows
	4. Clicks on reviews
	    a. They say outlets in all tables
	    b. Pictures
	    c. Sometimes it says in maps that you can take laptops but from personal experience sometimes they have some specific rules that are not in the maps
	    d. Not reliable

Ethnographic observation

1. **Environmental Context**

Location Description: There's tables, a bar for the food and drinks, shared bathroom, Wi-Fi, plugs (not in every table and one plug only), calm decorations, plants, yellow light and light from outside, big windows, no clothes hangers.

People are talking but it's not super loud, people working with headphones, people talking with friends, people alone eating, reading.

Friendly atmosphere, fast service, people of all ages but mostly around their 20-30's.

This place combines relaxing feelings (people just there to hang out with friends) and focused feelings (people working), so it's good for breaks and chats.

After lunch time people come in with kids, strollers, bikes so it looks more busy.

Good prices for breakfast food and drinks (coffees), people can have breakfast and lunch at a good price (10€ complete meal). Broad choice of food and drinks. Option to have anything on their menu to go.

Seating Arrangements: Small tables(working alone, max in 2 per table), stools, individual chairs, long benches (booths) with 2 or 3 tables.

Power Access: Not enough plugs for everyone(consider that this is a cafe and not a full equipped study place so has both simple customer and workers/students)

Lighting: Good sunlight in the place (big windows).

Noise Level: The place is not too noisy, people around are chatting making a good atmosphere.

2. User Behavior and Interaction

Arrival and Departure Patterns: Once you enter the cafe you are able to see all the tables, look for the one that is free and sit down so people are not confused with this system and they seem to know what to do.

Easy to find spots, thanks to the regular customers that do not stay there hours and hours, places are available very often.

Duration of Stay: Around 1-2 hours.

Device Usage: Laptops, printed things, notebooks, video calls, headphones (both for calls and music), books to read. Laptop policy: Max 3 Laptops per table at the same time, Max 2h of usage, NO on weekends. On the weekends you can't stay that long working in a device because they have more customers like families and friends coming to eat, more noise too.

Groups vs. Individual Work: As tables are not too big, some of the users are trying to balance all their things in the table, which seems a bit uncomfortable.

Breaks and Social Interaction: Students here alone, during breaks are on their phones alone, not talking to each other, but if they are with friends they chat with each other.

3. Amenities and Services

Wi-Fi Connectivity: There Wi-Fi and the password is in the menu or it is possible to ask the waitresses.

Food and Beverage Consumption: Students and workers take small food and drinks. One coffee, one juice, one croissant, one cookie, one …

Staff Interaction: The only interaction between the customers and the workers is asking for food and drinks.The staff is fast to welcome and serve the customer, but not fast in the cleaning of tables once users finish their dish/drink and considering the table size this could create a space problem.

4. Space Management and Flow

Crowding and Space Availability: Workers and students with laptops take the most time on tables, but there are a lot of people that only come here to have a drink and food, and once they finish they go, good rotation and free tables often.

Table Turnover: There is a pretty constant flow of people.

5. User Feedback

Observations of Frustrations or Delight: People enjoy the food and drinks they have.

Workers/students tend to buy little quantities of food, like coffee or juice, just to be able to sit in the place and spend little, like a ticket to get in. All students here have just one cup on their tables.

6. Additional Notes

Unique Features or Services: Decorations, good coffee, variety of drinks with different types of milk (matcha, chai, teas)…, can get water anytime you want from the bar (they have free glasses and water), a pet-friendly place, in the nights you can have drinks/cocktails.

Safety and Cleanliness: The waitress cleans every table once the customers go, seems pretty clean, the floor is clean, the bathroom is big, clean, and has decorations and a baby changer.

Personal experience: We had a nice time working, no problem with having our laptops on the table and stayed around 2 hours.

7.Annex B: modifications to schedule

Due to unforeseen circumstances we had to make changes to our original schedule. The updated schedule can be found in 1.1 description of activities performed.

Deviation 1: Demographic questions added

- "What is your age?"
- "What gender do you identify with?"
- "What is your country of origin?"
- "How many hours per week do you work/study remotely?"
- "What is your screen time for Phone/Computer per day?"

Deviation 2: Interviews

- Days of interview varied from the original plan due to availability of interviewees.
- One of the managers that was taken into account for the interview, had a lot of work on the chosen day so we only got some informal information and found someone else to do the whole interview.
- The other manager was changed as we found someone in Berlin that manages a business and was willing to do the interview.
- In the end we could get 9 interviews (4 students, 3 remote workers and 2 managers), 4 contextual inquiries (3 students, 1 remote worker) and 1 ethnographic observation.

Deviation 3: New observations description

For this project we will conduct contextual inquiry observations and ethnographic observations. For the first ones, we want to obtain a clear idea about users' mental model and detect hidden information that with interviews we can't elicit. We will ask them to perform two tasks to understand the process of how they search for study and work places and what factors influence their choices. For the latter, we want to get insight about how students and workers interact with each other and with the surrounding environment. For this observation, we want to go to a coffee shop, the

Urraca Cafè in Calle de Doña Urraca, 18, Madrid, where people go to study and work and dive into their physical, social and technological environment while studying and working. We will observe a maximum of 10 students/workers on a usual week day. We will go there after we do the interviews so that we will be able to confirm or contrast our information and gather new ones. We want to elicit information about their needs and pain points.

Deviation 4: New ethnographic observation template

This template provides a comprehensive overview of the user experience in the bar, focusing on its suitability as a workspace for students and professional workers.

1. **Environmental Context**

Location Description: Describe the physical location, ambiance, and general atmosphere of the bar.

Seating Arrangements: Note the types and arrangements of seating and their suitability for individual or group work.

Power Access: Observe the availability and accessibility of power sockets for charging electronic devices.

Lighting: Adequacy and type of lighting.

Noise Level: General noise level throughout the observation period.

2. **User Behavior and Interaction**

Arrival and Departure Patterns: How users find seating?

Duration of Stay: How long users stay and work/study.

Device Usage: Types of devices being used (laptops, tablets, smartphones) and any other work-related materials.

Groups vs. Individual Work: Differences of individual work versus group collaboration.

Breaks and Social Interaction: How users take breaks or engage in social interactions.

3. **Amenities and Services**

Wi-Fi Connectivity: Assess the ease of connecting to Wi-Fi and any related user behaviours or frustrations.

Food and Beverage Consumption: How users interact with the pub's food and drinks while working.

Staff Interaction: How users interact with the staff, especially related to their work/study needs.

4. Space Management and Flow

Crowding and Space Availability: How crowded the space gets and how users move in it.

Table Turnover: How quickly tables become available after being vacated and how it is managed.

5. User Feedback

Observations of Frustrations or Delight: Non-verbal cues of satisfaction or frustration.

6. Additional Notes

Unique Features or Services: Any unique features of the bar that might attract working professionals and students.

Safety and Cleanliness: The cleanliness of the environment and any measures taken to ensure user safety, which can impact the comfort and duration of stay.

Personal experience: Brief description of the observers' experience inside the working place.

Deviation 5: New contextual inquiry template

The new template is done trying to reduce the fields to collect in order to facilitate the observer in taking notes. The time is useful to measure the efficiency of the actual system users use. Steps, as its name suggests, is to track all the actions the users take and hidden thoughts in their tasks.

Time	Steps