



## Catogether business plan

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March 30, 2022

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# 1 Product

Catogether is a social networking app that allow users to create and/or join impromptu meetups of all kinds, from sports dates, dining out, to house parties and bar crawls. It has two main purposes, first, to speed up and optimize the traditional planning process of gatherings with friends, and secondly, to offer a novel way to make serendipitous meetups happen between strangers.

## 1.1 Impromptu hangout with friends

**Time and effort in event planning and organizing** The problem of hosting an impromptu gathering in traditional ways would be lengthy process and potentially off-topic discussion which might end up failing eventually. We want to design an app to increase the success rate of sudden gatherings and improve the speed of forming and hosting by systematizing the steps and processes of hosting. We also want to utilize eye-catching UI designs, clear signs and workflows, and UX elements to visualize information (e.g., comments of attendees, assembly time, price per person) of gathering/party/dating for the users.

**Managing expenses** Another problem with traditional way of hosting may involve money, the organizer pays for all the occurring costs first and split with the attendees later. Alternatively, imagine it's a birthday party, and attendees each pays part of the things they might need (e.g., balloons, decorations, birthday cake, flowers, etc.). However, it's quite troublesome to split the fees and collect afterwards, and people may forget to pay their share of the costs sometimes. To avoid the embarrassment and save efforts in making multiple transaction to each person, we intend to combine e-payment flow/ online accounts (e.g., Monzo, Starling and conventional banks) to collect individual fees in advance and save them as sharing budget to deal with such issues.

**Key challenge** One of the challenges is how to design an effective UI flow to make the planning process as smooth as possible and easy to use. For example, we want an intuitive and straightforward workflow from creating and add specific requirements to an event, to inviting people, and to splitting the fees. Additionally, we want to have an elegant and eye-catching UI interface that will optimize the visual experience. To achieve this, we will first come up with prototypes with the main functionalities, and conduct AB testing, as well as usability tests to gather feedback on the initial designs. Based on what users' likes and dislikes we will complete several iterative cycles of developing and gathering feedback, and finally come up with a satisfying piece of design.

A second issue concerns the security and legal procedures of adding payment capabilities. In our initial design for the app, we considered a pre-pay mechanism, i.e., whoever want to attend pre-authorize to the fee that may occur, and then the split is automated, which could potentially avoid late payment. However, this opens a whole pandora's box of technical and security issues of implementing payments, including the mechanics of how to handle authorizations and transactions, creating payment gateway and network, dealing with declined payment and processing refund. Consequently, we decided not to meddle with transactions per se. Instead, the platform will dedicate to help split bills and manage joint expenses that may occur in a gathering. Basically, it will help users figure out who owes whom and how much. Users just need to input the bill details and the system will use algorithms to do the dirty work for you.

## 1.2 Serendipitous meetups

Our second mission is to offer a better gateway to serendipitous and spontaneous meetups. Humans are social animals, it seems nothing affects our lives and happiness more than the people around us. Nonetheless, the way we bring new people into our lives is so limited and random. Therefore, we just wondered if we could offer a novel channel for people to meet and connect.

**Origin of concept** When we think of spontaneous events, it's hard not to bring up the age-old thought experiment called Schrodinger's cat (geeky I know). This is also how we came up with the name Catogether—we borrowed the concept of cat for a get-together app. In the experiment, a hypothetical cat is considered by quantum physicists to be simultaneously both alive and dead. This is because its fate is linked to a random subatomic event that may or may not happen, in this case, a gathering of people that may or may not happen.

**Box feature** One of the most important concepts of the app lies with the boxes, where Schrödinger kept his cat. The boxes are now a space occupied with all sorts of random meetup proposals. Each box has a name for the event, a brief description, a date, and place, expected number of people, and an optional countdown. Users can

browse through the event boxes in the home screen, if they see an event they're interested in, they can click 'join' right away. On the other hand, users can also post their own boxes, simply by writing down an event proposal and specifications, then wrap it, seal it, and post it.

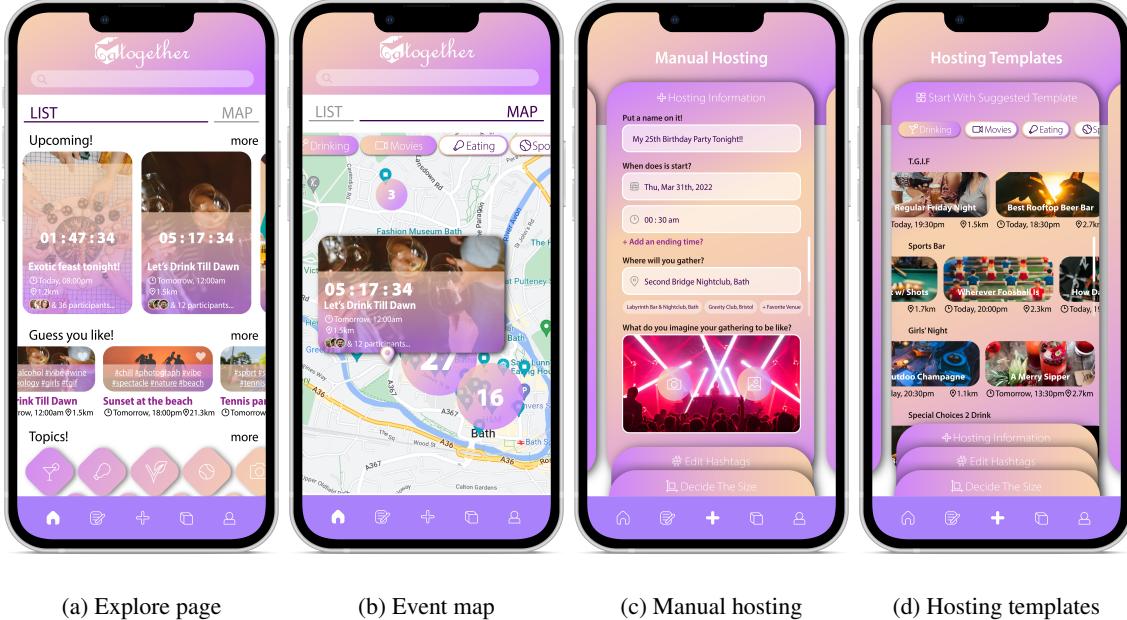


Figure 1: Main features of Catogether

**Key challenge** The goal for spontaneous meetups is to make this process of meeting new people less random while keeping it serendipitous, which sounds quite contradictory. So our plan to address this problem is to work out a mechanism which we could display event boxes to people with mutual friends (or friend of friends) and share similar interests. Second, for the serendipitous meetup to work, we will ask for user's permission to use their locations, in this way, users can actually be physically available for the meetups.

## 2 Market

### 2.1 Market Size

From the article (MaRS, 2022), we can briefly know that:

Market volume = Number of target customers × Penetration rate

Market value = Market volume × Average value

### 2.2 Customers

The customers of our product are higher education students (as HE students below), specifically students who feel lonely at university and need some approaches to making new friends or consolidating existing friendships. According to the statistics from Figure 2 (HESA, 2022), the number of HE students is considerable with an increasing tendency. Therefore, it is much predictable that the number of potential customers of our product would stay on a high plane in the next few years.

#### 2.2.1 How our customers feel now

Based on Wonkhe's research (Wonkhe, 2019), we were aware of the situation that in the past couple of years there were a lot of students suffering from loneliness. In line with the research's result, nearly one-third of students said they felt lonely weekly, and over 15% of them would have the same feeling daily. Unfortunately, figures were even worse for Disabled students, Black and Minority Ethnic students and International students. Therefore, loneliness has been becoming a serious problem for mental wellbeing among higher education students.

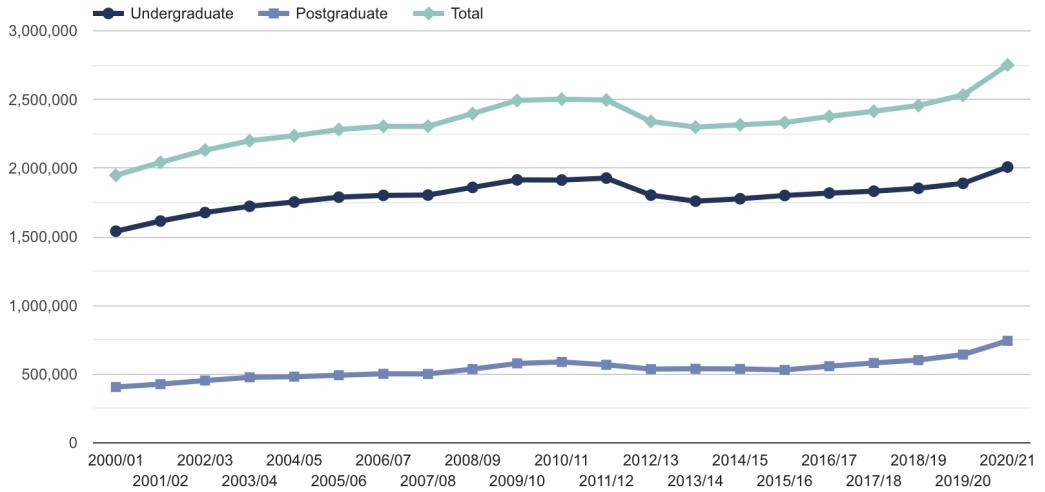


Figure 2: Students by level of study Academic years 2000/01 to 2020/21

When it comes to accompanies, only 77% of students said that if they needed help, especially in their lonely period, there would be people who would be there for them. And vary from nationalities, non-EU students whose number is 408,825 (HESS, 2022), accounting for nearly 16.14% of that of total students during the academic term 2019/20 (Figure 3) were almost 10% points less likely to agree that there are people they can call on.

	England ↓	Wales ↓	Scotland ↓	Northern Ireland ↓	Other UK ↓	Total UK ↓	Other European Union ↓	Non-European Union ↓	Total Non-UK ↓	Not known ↓	Total ↓
The University of West London	9,085	95	60	30	5	9,275	1,410	1,295	2,710	0	11,985
The University of Westminster	12,860	55	30	20	5	12,975	2,170	4,325	6,495	0	19,470
The University of Winchester	7,325	80	20	30	90	7,545	135	320	455	0	8,000
The University of Wolverhampton	17,175	105	25	25	0	17,335	220	1,315	1,535	0	18,875
University of Worcester	8,710	350	15	30	5	9,110	445	625	1,070	0	10,180
Writtle University College	680	5	5	15	0	710	30	25	55	0	765
York St John University	6,260	50	35	35	15	6,395	100	505	605	0	7,000
The University of York	14,595	290	165	80	75	15,200	815	3,775	4,590	0	19,790
<b>Total</b>	<b>1,627,410</b>	<b>103,605</b>	<b>177,225</b>	<b>62,690</b>	<b>4,450</b>	<b>1,975,380</b>	<b>147,800</b>	<b>408,825</b>	<b>556,625</b>	<b>385</b>	<b>2,532,385</b>

Figure 3: HE student enrolments by HE provider and domicile Academic year 2019/20

## 2.2.2 Customer demand analysis

What do our customers need? In Wonkhe's research, the interviewees were asked to choose up to three factors which they were worried about, and the outcome revealed that almost half of the students were concerning their mental health, which was a figure that varied significantly depending on the number of friends they had (Wonkhe, 2019). So friendship is a major element relating to mental health, to some extent, making more friends help reduce feelings of loneliness and stay in a good mood.

While, how do HE students get friends? Wonkhe's research also answered, 66.4% of students would choose friends from their course, faculty, or department, followed by students whose friends are from their hometown(53.3%), apart from these, students also prefer developing friendships with others who have the same hobbies(35.1%) and were allocated as roommates(33.0%). In our questionnaire (see the appendix), which 48 people involved, there

is only 21% of them prefer enjoying alone time on weekend evenings. For the others, 24 out of 47 enjoy joining activities with other people, and only 2 of them would spend time themselves. It is obvious that 'Socialise'(30) and 'Meet new people'(15) account for more than 60% in term of the motivations of other-people-involved activities. Therefore, we can see that people are more willing to spend leisure time with others because it is indeed a way of making friends or reinforcing friendships to kill loneliness.

And what are the main obstacles to doing so? In our questionnaire, we provided some choices and asked interviewees to specify more if they want. It turns out that people are the key, whether they can find enough people (22.58%) and the 'right' people (34.41%) nearly determine the success of the gathering. Another big resistance is decision-making (29.03%), even if they get enough and suitable people, they would face realistic questions like 'what to do', 'when', 'where to go'. Moreover, people always hold different ideas to these questions, which would easily make the gathering unhappy or even unreachable. But if there is an app that can help them kill these difficulties, 82.98% (39 out of 47 ) of them are likely to use it. That exactly encouraged us to create our app. Things mentioned above help us locate the user pain points. We have the confidence to fix these issues and eliminate barriers by our functional and user-friendly design.

### 2.2.3 Number of target customers

In the circumstances that there are a huge number of HE students with the loneliness issue, we are dedicating ourselves to providing some functional services on our platform, with considerable designs, to relieve or even help them get out of the dilemma. So before bringing our idea into reality, the purchasing power of our customers is a fundamental factor contributing to the product's future success. As we mentioned above, the figure of HE student enrolments is 2,751,865 in the academic year 2020/21, and almost one-third of them feel lonely weekly, only 77% of students could get someone to accompany them when they are having a loneliness issue. So assume that 30% of the total HE students, that is **825,559** in the year 2022, are the potential customers, as **Number of target customers**.

### 2.2.4 Determine the penetration rate

Market penetration refers to the successful selling of a product or service in a specific market. It is measured by the amount of sales volume of an existing good or service compared to the total target market for that product or service (Wikipedia, 2022). So penetration rate helps calculate the number of customers we can reach in among the total. However, there are many factors influencing the penetration rate determination. If your product is recommended by governments or regulations, for instance, the 'NHS APP' or the 'Covid-19 APP', they would have higher rates, especially during the pandemic, while we can only assume low rates for products with specific functions like our application, in practice less than 1% is very normal. As shown on Wikipedia, comparing to the existing good or service is a good way to gain our penetration rate. So let us adopt the statistic from the hypothetical competitor 'Meetup App'(Meetup, 2022), which is an application also helping people meet in person and providing services over more than 180 countries, unfortunately, we can not find precise figures of users divided by age groups or occupations, so roughly we can calculate our rate by the Meetup's total user number. From the Meetup's sale (Perez, 2020), by the time of the selling, i.e. March 2020, Meetup served 49 million registered members, meanwhile, there were nearly 4585 million internet users around the world (ITU, 2021).

Assuming the users are distributed equally among all categories, such as age, occupation, and hobby, then we can get the penetration rate by  $49 / 4585$ , which is about 1.069%. While exactly, as far as we know there are a large number of countries and regions all over the world, and some countries like China(Stats, 2021) which has the highest number of internet users but even no contribution to the 49 million mentioned above. Therefore, it is reasonable that in the UK the rate of Meetup would be higher than 1.069%. So let us adopt **0.8%**, which is much less than 1.069%, as our **Penetration rate**.

### 2.2.5 Average value

Thanks to the survey carried out by the National Student Money Survey (Brown, 2021) which (2020/21) was the ninth year of it, identified how students across the UK approach money management. Figure 5 shows the constitution of average money spent per month by students, the proportions of 'GOING OUT' and 'TAKEAWAYS & EATING OUT' occupy the third and fourth position of the total spending list. As our product's main feature is organizing spontaneous activities with money expenditure and no-money expenditure to help meet new people and to make friends, these two categories would be covered partly. And suppose our product will boost users' spending on leisure industries, the percentage of items related will be increased. So we assume each HE student would yield an average value of £25 per month, which is the **Average value**

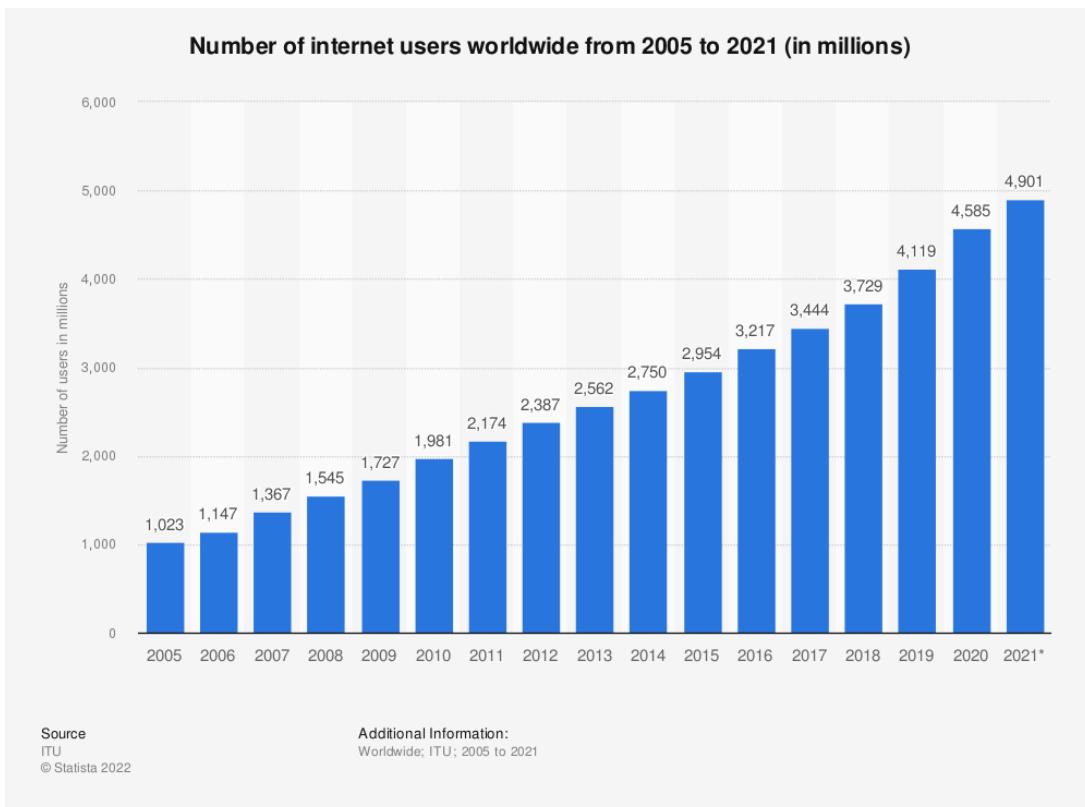


Figure 4: Number of internet users worldwide from 2005 to 2021

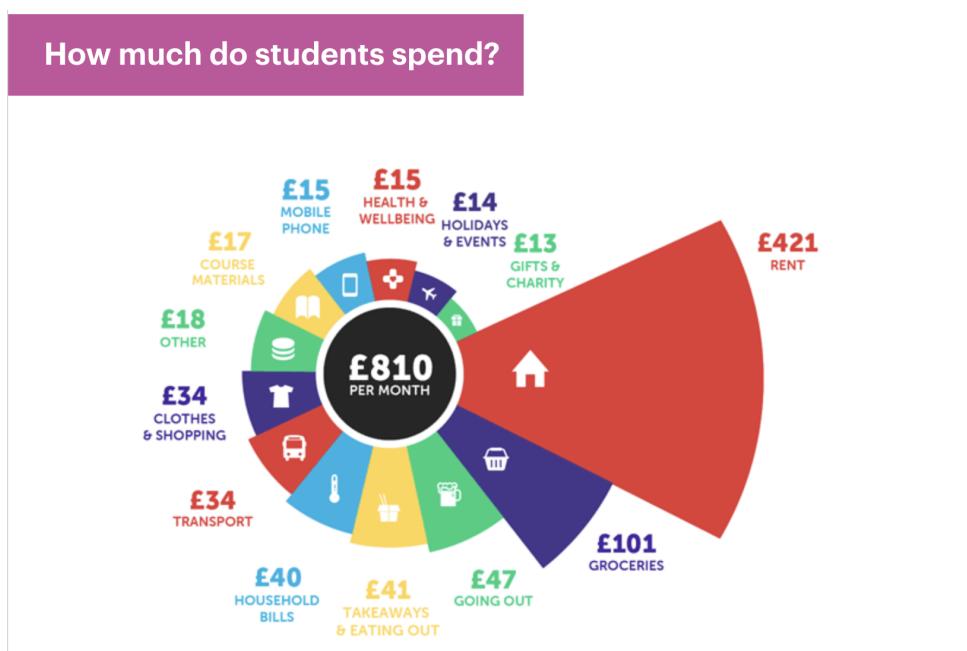


Figure 5: How much do students spend?

## 2.3 Market value

With the **Number of target customers**, **Penetration rate**, and **Average value**, we can assume the market value by formulating,  $825,559 \times 0.8\% \times £25/\text{month}$ , that is £165111.8 per month.

Although, merchants could get more implications of this figure, we did prove there is such a considerable purchasing power among our target customers. As for how can we get profit from it, we would discuss in the following section.

## 2.4 Competitors

Identifying competitors is an essential step in entrepreneurship. Many services and applications share common functionalities and nature, and it is important to investigate and identify the advantages and disadvantages of their products to build one that could stand out among the others. In fact, every application should have its uniqueness or function that is different from its competitors. As a result, understanding our competitors would be crucial as it assists us to distinguish the difference in between, helping us to identify and intensify our unique selling proposition, which ultimately enhances the attractiveness of our product.

As our application mainly provides services for users to create, manage and pay for immediate or sudden gatherings, our main competitors would be distinguished into two types: event holding social applications and budgeting applications. We found a few applications with high popularity that provide related services for both two types. Below we examine their strengths and weaknesses, so we could know what we could focus on our application to make it stands out from them.

In terms of event holding services, there are two popular applications on the market, namely MeetMe and MeetUp. For MeetMe, it allows users to add tags and input their interests and habits to describe themselves. The system will suggest persons according to their related interests and habits. Users then can pick according to their desire and get connected right away. They could create and join groups within the community. MeetMe provides a function that allows users within a group to easily create events and gatherings and pick a venue and time. According to first-hand experience, many of the groups are created without prior planning, meaning that the application promotes a kind of random and sudden gatherings, which is beneficial to our target users. However, although MeetMe is a great application for event holding, it is sometimes identified as ‘casual’ applications that promotes inappropriate events, such as hook-ups or gatherings with the use of drugs. Another thing to point out is that the introduction of profile pictures usually caused users’ appearances to be used as a huge factor, but not really meeting people who share same thoughts and interests.

For MeetUp, on the other hand, focuses on creating events with different persons who share common interests, meaning that the participants do not have to know each other before gathering, but based on their interests. Every participant should have their own account and can create gatherings within the applications. Users would have to write a brief description of the event in order to attract other members to join. They can also set parameters for the group, for instance, common topics and identities. Overall, it fits the idea of sudden gatherings, but they lack enough voting mechanisms and budgeting functions. Users would have to pay subscription fee to access all the functions.

In terms of budgeting services, we have another two popular applications on the market, namely Collectiv and Splitwise. Collectiv is an application that provides a quick and easy platform for users to transfer money to a specific user. Collectiv helps users to collect money upfront from other users, gathering funds to organise events or purchasing products. It is aimed to solve tedious problems like chasing money back from friends. After creating a ‘pot’, a real-time balance would be shown and be updated as people pay and withdraw from pool. User can also easily generate links and QR codes to collect money from friends. This is a very good feature, but users would have to either ask friends to scan it physically or sending links through messaging applications, which might take the same amount of time as traditional ways like bank transfers and Paypal.

For Splitwise, it focuses on the process of splitting money, allowing users to split the bills in different partitions within the group. Users would need to create a room in the application and inviting other users to join. Every time when or after users hold a gathering, money will be split evenly or at any desired ratio and be marked down within the group room. Group members could be excluded if they did not join the gathering, and debts are ‘transferable’ to others under certain consents. Users would then have to settle the debt using Paypal or bank transfer after the gathering, or even after few gatherings since all of them are recorded. However, this is designed as a ‘friend-based’ budgeting application instead of a broad application for everyone if they want to meet new people or random gathering. It might also cause confusion if information is not inputted in detailed matter.

Our unique proposition is to provide an application that gathers both functions mentioned above, with improved and brand-new functions introduced. In other words, a two-in-one application that both helps users with making gathering with detailed information like venue and time, and budgeting services that help avoiding problems like chasing for debt. Our application is not only focusing on holding gatherings with friends but everyone who wants to participate in sudden gatherings and events who share same interests, identities, and topics, making it more

universal and easier to use. We believe our product could benefit everyone, bringing a fancy but effective impact to the society, and connect more people together.

## 3 Strategy

### 3.1 Company Overview

Our company will be a private company limited by shares based in Bath and Bristol because our liability will be limited to our shares and it will be easier to raise capital by issuing shares than by issuing shares. In accordance with the basic concept of a private company limited by shares, our liability will be limited to our shares and we will be incorporated with 100,000 shares at 15 % each and retain a seat on the board of directors.

### 3.2 Finance

We decided to use equity-based crowdfunding to raise capital, allowing investors to become one of the owners of our business and allowing them to receive a return on their investment as well as dividends or distributions based on their share of the profits in our business

Bath has a 18-24 population of 28, 116 in 2019, which is the whole potential user base. On this basis, we project a total of 5000 users by the end of year one, and given Catogther's nature as a social networking app, existing users would want to invite their friends to host and/or attend events together. Therefore, as users group strengthened in year one, an exponential market growth was expected in year 2 and 3.

The financial table below demonstrates the predicted sales and expenses over the first three years. The primary goal for Catogther in the first year would be expanding its user base and minimize running costs with less emphasis on immediate profit.

	2022	2023	2024
<b>Estimated active users</b>	5,000.0	10,000.0	45,000.0
<b>Sales</b>			
Sponsorship	0.0	8,000.0	36,000.0
Premium subscription	0.0	3,998.0	17,991.0
<b>Operating expenses</b>			
App development & maintenance	0.0	0.0	0.0
Marketing	3,000.0	8,000.0	3,000.0
Wages	0.0	2,000.0	3,000.0
<b>Total Income</b>	0.0	11,998.0	53,991.0
<b>Total Expenses</b>	-3,000.0	-10,000.0	-6,000.0
<b>Total</b>	-3,000.0	1,998.0	47,991.0

Figure 6: Profit and Loss Table

There are several revenue streams within the blended business model Catogther proposed, the primary being B2B revenue generated via sponsorship spots. This entails the business to partner with local event holders, restaurants, bars and clubs to advertise their events in users' feeds, sponsors can also hold event boxes of their own which will be pushed to the explore page. On each successful attendance of the event via our platform, a 5% service charge of the total bill will be collected.

Another source of income comes from gated features in the freemium approach. The balance between free and paid features will be carefully decided, while attracting free users and convincing them to pay for an upgrade. Moreover, the conversion rate from free to paid membership generally lies somewhere between 2-5% (Harvard

Business Review, 2014). This is also why the freemium model was only used as a secondary approach. The estimated revenue table below took the conservative 2% conversion rate as reference, with a provisional £19.99 annual subscription fee.

### 3.3 Operational Plan

As our main target audience is university students, our initial plan is to get in touch with the University of Bath Students' Union and work with them to bring students from the University of Bath to our platform through club events and school promotions. The key value of our app is to provide a multi-functional 'party manager' that will push users to the right businesses and venues. We decided to contact various local businesses in Bath such as restaurants, bars and other venues in the meantime to advertise our posters and promotions in their shops on a free basis. However, this function took time to develop and to contact and work with the businesses. As a result, the first users were rewarded with a small gift card from a merchant for referring a friend to download and use our software. As well as organising a party on campus in conjunction with the Students' Union and the Music and Dance Club, offering free drinks and pizza and inviting everyone who wants to download our app to attend. We will deduct £2,000 from our budget to support the development and growth of this event.

Sponsorship will be available once a sufficient number of users have used our app and the resource requirements will be covered by the revenue stream from sponsorship. Google Play and Apple store will be our sales channels. For each of our app launches (Android, iOS), we will target university students and social media users, who we expect to be our first users. We will then expand our potential audience through targeted Google Ads, Facebook Ads, as well as our own social media and PPC (Pay Per Click)/SEO (Search Engine Optimization).

We will be increasing our spend once the app development is complete, when relevant terms such as "party" and "hang out" will be keywords in Google searches for our app. Embedding "party, fun, social, easy and worthwhile" into everything we do. Our branding will emphasise socialising and neediness. We will launch the initial version during the start of the university season and refine it later. Our brand will be dedicated to and serve young people and those with social needs. As they receive the same services and benefits as the promotion, the cost of user acquisition will be reduced, users will voluntarily share the app to social platforms and drive people around them to use the app, the cost of acquiring new users will be low or even close to zero, and we will gain greater publicity.

With a sizable user base, we will negotiate sponsorship deals with a variety of brands. This will include take-away outlets, alcohol brands, restaurant brands, nightclubs etc. who may be interested in marketing on our software to increase their exposure and likelihood of being selected. Once our software has penetrated as much of Bath's business venues as possible as well as the market, we will begin to expand to the next city, Bristol. Linking up with the University of Bristol's Academic Union will be our intended course of action. In this way, we can expand to cities with universities, promote our software's selling point of "simple, easy and social" and then attract local university students to become users and businesses to become our partners. Once we have raised the start-up capital, we will aim to work with major merchants to get unique discounts and offers for our users. Customer service feedback will drive a monthly bug fixing and new feature development release schedule, and we will plan events to increase user retention.

### 3.4 Talent plan

#### 3.4.1 Skills

To create a new app from scratch, the first thing that comes into mind is the app development team, which usually consists of some basic roles like product managers, UI/UE designers, iOS and Android developers, back-end developers and quality assurance testers.

To make the best use of our existing team, we would devote ourselves to the development.

- **Cambridge Chan** will be our Product Manager, who is responsible for leading an entire project through planning, execution, control, and completion. He has systems engineering and engineering management background and IT consultant experience and would be capable in managing the project.
- **Amelia Wang** and **Shawn King** will be in charge of UI/UE designing, since they both have Human Computer Interaction background and designer experience, which enables them to create the prototype of the app.

In particular, Amelia owns a bachelor of psychology degree, which contributes to users experience design.

- **Eddie Huang** will carry out the iOS app development job due to his three-year working experience as a software developer.
- **Ziting Zhao** who possesses experience of software developing and computer science background will focus on development of the Android app.

We were planning to hire a professional server-side developer, who must has former working experience in industry. While after researching the average salary of it, we would search for a student inside University of Bath who has interest in our startup and is capable to accomplish the back-end job. However, for the testing part, to lower the cost, we are decided to test the app by ourselves at the very beginning stage, and hire a professional tester in the later version development.

### 3.4.2 Time

In terms of time, usually it would take three to four months to successfully develop an app, but it depends on the prototype design. Considering the features of the app's first version, we would set the first version development period to three month. Detailed plan:



Figure 7: 1.0 version dev timeline

## 3.5 Further Sales & Marketing Plan

The application will be first launched on the iOS platform. The iOS platform has a market share of 30% among the mobile and tablet operating systems as of February 2022 (StatCounter, 2022). In fact, it is a good opportunity to test the market and check if our product is popular or widely-supported by users, before launching to Android. We will then decide a date to expand our product into other platforms, allowing more potential users to consume our product.

We would then be collaborating with popular Youtubers and Instagrammers, paying them to help promote our application in different strategies such as active and passive advertisement where they could directly advertise our product, or using it in a certain occasion such as holding parties, to make it less obtrusive. Embedded advertisement is also a great option due to celebrity effect. This should help boost the further sales after the product is initially launched.

## 3.6 Risk Management

The predictable risks would be divided into two parts, which is risks regarding the sales, and technical risks of our product. For the sales part, as our product relies much on advertisements from companies of a variety of genres such as karaoke shops or pubs, we might face financial problems. What our tactic is is to attract or even collaborate with the shops and provide discounts, it would attract users in using our application and boosts our number of users and subscriptions.

In terms of technical risks, the biggest challenge we might encounter is software or server breakdown, as well as system security issues. As a result, we would need to have more manpower to do daily maintenance work, even when the application is successfully launched. We also have to form a team of software security engineers to handle penetration testing and data encryption tasks, or even implementing an "on call" IT specialist to deal with sudden emergencies. This could also increase the confidence of our users, increasing their interest and intention to use our product as we respect every bit of information they gave to us. Overall, the solutions provided could help in risk management of our application, minimising all potential chances of failing.

## 4 Reference

### References

- Brown, L., 2021. *Student money survey 2021 – results*. <https://www.savethestudent.org/money/surveys/student-money-survey-2021-results.html>.
- HESA, 2022. *Who's studying in he?* <https://www.hesa.ac.uk/data-and-analysis/students/whos-in-he>.
- HESS, 2022. *Higher education student statistics: uk, 2019/20 - where students come from and go to study*. <https://www.hesa.ac.uk/news/27-01-2021/sb258-higher-education-student-statistics/location>.
- ITU, 2021. Number of internet users worldwide from 2005 to 2021 (in millions) [Online]. Available from: <https://www.statista.com/statistics/273018/number-of-internet-users-worldwide/>.
- MaRS, 2022. *How to estimate market size: business and marketing planning for startups*. <https://learn.marsdd.com/article/how-to-estimate-market-size-business-and-marketing-planning-for-startups/>.
- Meetup, 2022. *Meetup website*. <https://www.meetup.com/>.
- Perez, S., 2020. *Wework sells off social network meetup to alleycorp and other investors*. <https://techcrunch.com/2020/03/30/wework-sells-off-social-network-meetup-to-alleycorp-and-other-investors/amp/?guccounter=1>.
- StatCounter, 2022. Mobile & tablet operating system market share worldwide [Online]. Available from: <https://gs.statcounter.com/os-market-share/mobile-tablet/worldwide/#monthly-202102-202202>.
- Stats, I.W., 2021. Countries with the highest number of internet users as of december 2019 (in millions) [Online]. Available from: <https://www.statista.com/statistics/262966/number-of-internet-users-in-selected-countries/>.
- Wikipedia, 2022. *Market penetration*. [https://en.wikipedia.org/wiki/Market\\_penetration](https://en.wikipedia.org/wiki/Market_penetration).
- Wonkhe, 2019. *Only the lonely – loneliness, student activities and mental wellbeing*. <https://wonkhe.com/blogs/only-the-lonely-loneliness-student-activities-and-mental-wellbeing/>.

## 5 Appendix

Spontaneous Get-together app (Edit) Microsoft Forms

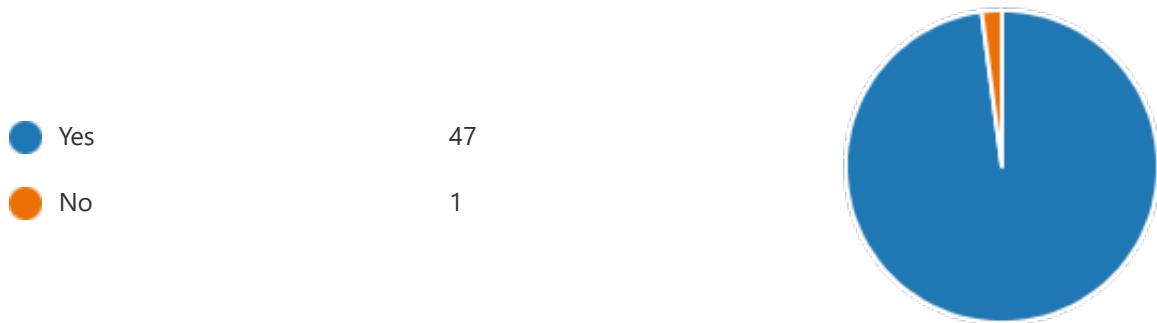
19/03/2022, 21:26

Forms(https://www.office.com/launch/forms?auth=2&from=FormsDomain) ? Yiping Wang YW

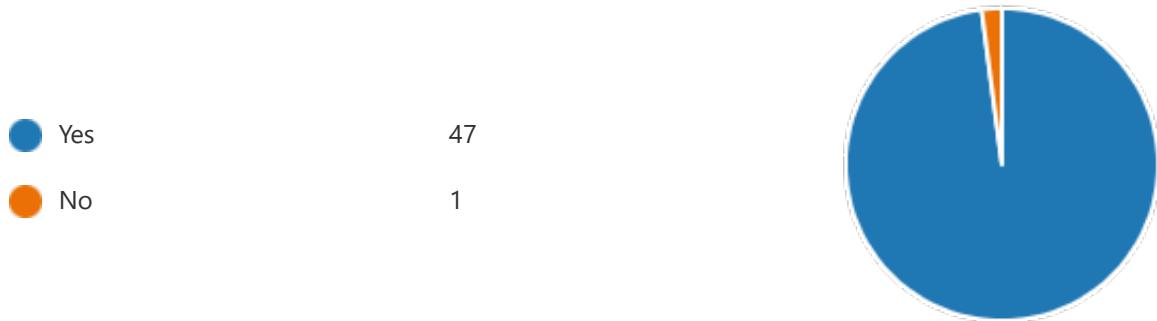
### Spontaneous Get-together app

48                    07:21                    Active  
Responses      Average time to complete      Status

1. I confirm that I have read and understand the information sheet for the study



2. I understand that my participation is voluntary and that I am free to withdraw without giving any reason at any time, by closing my browser.



3. I consent to the processing of my personal information for the research purpose only & will be held confidentially and handled in accordance with all applicable data protection legislation.

<span style="color: blue;">●</span> Yes	46
<span style="color: orange;">●</span> No	2



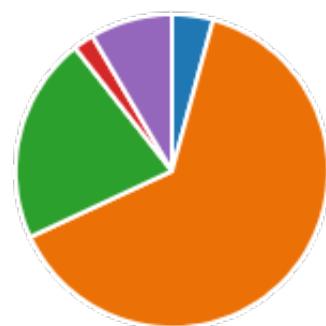
4. I give consent to continue with the study.

<span style="color: blue;">●</span> Yes	46
<span style="color: orange;">●</span> No	2



5. What is your age?

<span style="color: blue;">●</span> Under 18	2
<span style="color: orange;">●</span> 18-24	30
<span style="color: green;">●</span> 25-34	10
<span style="color: red;">●</span> 35-44	1
<span style="color: purple;">●</span> 45+	4



## 6. What is your gender

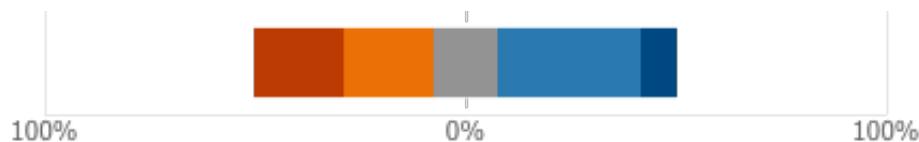
Female	28
Male	11
Non-binary	3
Prefer not to say	0
Other	5



## 7. Imagine it's a Friday evening, you finished all the work, and realised you have nothing to do. How lonely would you feel in this situation?

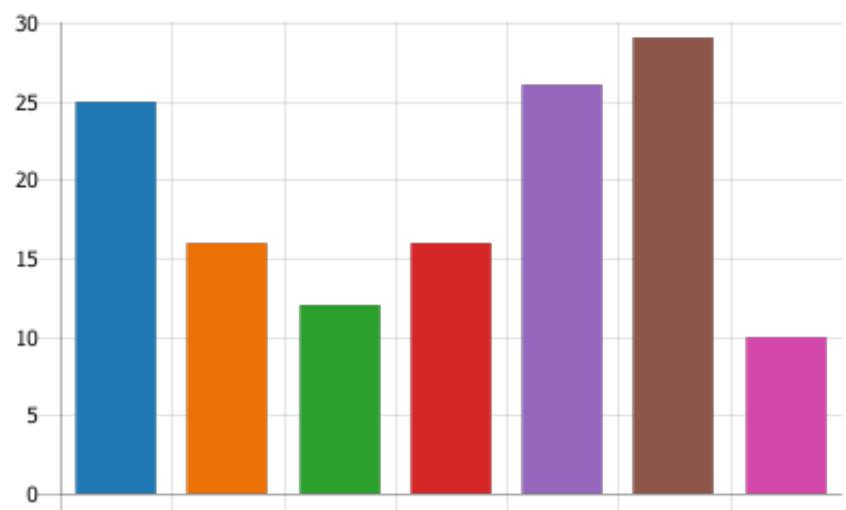
Not at all lonely   Somewhat not lonely   Nothing   Somewhat lonely   Lonely

How would you feel?



## 8. How do you typically spend a weekend evening?

Eating out	25
Bars/ Clubbing / Home party	16
Playing sports	12
Shopping	16
Watch movies	26
Enjoying alone time	29
Others	10



## 9. If others, please specify

12  
Responses

Latest Responses

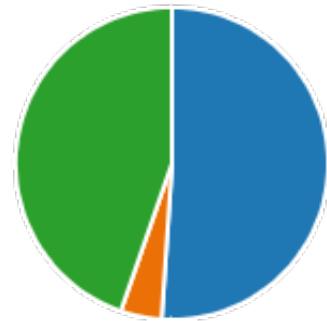
"playing video games, studying for the exams, skyping with fri...

2 respondents (17%) answered **game** for this question.

**games, read books**      **Masturbate**      **Karaoke**  
**time with my honey**      **Netflix and chill**      **room**      **chick dancing**      **old**  
**spending time TV game**      **gamefriends**      **exams**  
**Sleeping**      **naked chick**      **video games**      **date**  
**dancing in the funeral**      **special made hamburger**

## 10. Do you prefer to do the above mentioned activities with other people than alone?

Yes	24
No	2
Maybe	21



## 11. If you want to do these activities with other people, what is your motivation?

Socialise	30
Meet new people	15
Kill time	19
Others	7



12. If other, please specify

6

Responses

Latest Responses

2 respondents (33%) answered **people** for this question.

**friends people**      **dead people**  
**inner energy**  
**想和“别人”一起**

13. Have you ever feel it's *time-consuming* to find people to do these things with you?

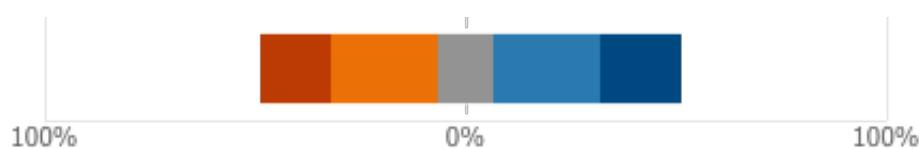
Always	8
Often	5
Sometimes	18
Rarely	14
Never	2



14. If you have some time to spare, how likely will you attend a spontaneous gathering?  
e.g. idea contemplation to action in less than 2 hours

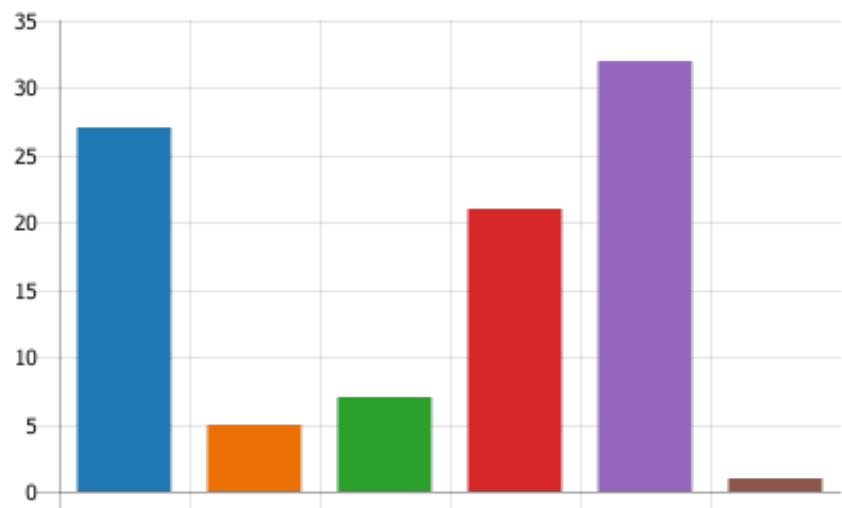
Very unlikely   Somewhat unlikely   Neither likely nor unlikely   Somewhat likely   Very likely

Drinking/ Tennis/ ... in 2 hours? Let's go!



## 15. What difficulties do you find in a gathering?

<span style="color: blue;">●</span>	Decide the activity/ time/ venue	27
<span style="color: orange;">●</span>	Splitting the bill	5
<span style="color: green;">●</span>	Control the budget	7
<span style="color: red;">●</span>	Finding enough people to do it	21
<span style="color: purple;">●</span>	Finding the right people to do it	32
<span style="color: brown;">●</span>	Others	1



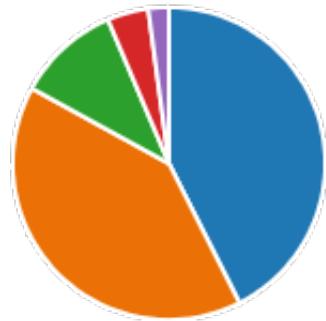
## 16. If other, please specify

3  
Responses

Latest Responses

## 17. If the above mentioned difficulties/ barriers are eliminated by an app, how likely are you to use it?

<span style="color: blue;">●</span>	Very likely	20
<span style="color: orange;">●</span>	Somewhat likely	19
<span style="color: green;">●</span>	Neither likely nor unlikely	5
<span style="color: red;">●</span>	Somewhat unlikely	2
<span style="color: purple;">●</span>	Very unlikely	1



## 18. Do you have any further comments that you think will help us in our app development?

4  
Responses

Latest Responses