

A Work Project, presented as part of the requirements for the Award of a Master's degree  
in Management from the Nova School of Business and Economics

ACTIVE UNION: AN EARLY-STAGE VENTURE AS MEANS TO IMPROVE THE  
SPORT ECOSYSTEM OF UNIVERSITIES

Luca Mack 43336

Sebastian Bormann 43277

Work project carried out under the supervision of:

Professor Euclides Major

May 21<sup>st</sup>, 2021

## **Abstract**

The work project accompanies the creation of an early-stage venture as means to improve the sports ecosystem of universities by developing a mobile application for students. Recent trends and conducted research show the gap for a university-integrated mobile application that is focused on different sport activities. This work project depicts the introduction and contextualization of “Active Union”- Connecting through sports. The vision behind the idea is to develop a *university sports ecosystem platform*. Students can meet new like-minded people and easily participate in various sport classes at university, whereas universities can coordinate and administrate all activities on one platform while simultaneously improving the overall student experience tremendously.

**Key Words:** Entrepreneurship, Venture Development, Lean Start-up, Mobile Application, Fitness Industry, University Sports Ecosystem

This work used infrastructure and resources funded by Fundação para a Ciência e a Tecnologia (UID/ECO/00124/2013, UID/ECO/00124/2019 and Social Sciences DataLab, Project 22209), POR Lisboa (LISBOA-01-0145-FEDER-007722 and Social Sciences DataLab, Project 22209) and POR Norte (Social Sciences DataLab, Project 22209).

# TABLE OF CONTENTS

---

- 1. Project Overview..... 1**
- 2. Contextual Market Overview ..... 1**
  - 2.1. Industry Overview .....2
  - 2.2. Consumer Trends.....3
- 3. Methodology and Research Question..... 5**
- 4. Market Validation..... 6**
  - 4.1. Survey Data Analysis .....6
  - 4.2. Expert Interview Analysis .....9
  - 4.3. Validation of Hypotheses ..... 11
- 5. The Business Idea..... 12**
  - 5.1. Pain ..... 12
  - 5.2. Solution..... 13
- 6. Market Analysis ..... 14**
  - 6.1. Competitors ..... 14
  - 6.2. Customers ..... 19
  - 6.3. Partnerships ..... 19
- 7. Product..... 21**
  - 7.1. Product Design .....21
  - 7.2. App User Interface .....22
- 8. Marketing ..... 24**
  - 8.1. Target Segments .....24
  - 8.2. Pricing & Positioning Strategy .....25
  - 8.3. Branding & Advertising Strategy .....26
- 9. Operations ..... 30**
  - 9.1. Operational Goals & Objectives.....30
  - 9.2. Operational Process .....31
- 10. The Numbers ..... 34**
  - 10.1. Customer Lifetime Value (CLV).....34
  - 10.2. Profit & Loss Statement .....36
  - 10.3. Cash Flow & Investment Proposal .....39
- 11. Conclusion ..... 39**
- List of References..... 42**
- Appendices..... 47**

## **1. Project Overview**

---

Moving abroad to study in a different country can be both exciting and overwhelming. Next to the busy schedule and demanding environment at university, sports is often the only way to find balance. After coming to Lisbon at the beginning of 2020, two sport fanatic students started to look for opportunities to get to know other students through sports. However, both realized quickly that the offer was minimal. After the two discovered the problem, they felt the need to do something about it. What originally started as the idea to find new sport mates in a “Tinder matching” fashion has now emerged into the vision of revolutionizing the university sports ecosystem in Europe: establishing a sports culture similar to what the universities represent in the United States.

This work project depicts the introduction and contextualization of “Active Union”- Connecting through sports. The vision behind the idea is to develop a *university sports ecosystem platform*. Students can meet new like-minded people and easily participate in various sport classes at university, whereas universities can coordinate and administrate all activities on one platform while simultaneously improving the overall student experience tremendously.

The project is organized as follows: first, a holistic market overview is provided to understand the status quo and current trends. The subsequent section will introduce quantitative and qualitative based research findings (e.g. a survey and expert interviews) to validate the potential of the opportunity. Further on, the business idea will be further explained with current pain points and a potential solution followed by an in-depth product description with a typical app walkthrough. Afterwards, marketing and operational processes are explained in detail. Finally, financial key figures are defined, and an overall conclusion is drawn.

## **2. Contextual Market Overview**

---

This chapter will introduce a general industry overview and highlight current consumer trends that shape the market to demonstrate the relevancy of the business idea. In the following, several

indicators will be outlined to explain why the German fitness market has been selected as the first go-to-market.

## **2.1. Industry Overview**

---

According to IHRSA (2019), the global health and fitness club industry represented an estimated \$96 billion market in 2019 and showed steady growth in recent years. With around \$38 billion in revenue, North America accounted for the largest region, followed by Europe (\$32b) and Asia-Pacific (\$17b) (IHRSA (a), 2020). In 2019, there were more than 205,000 fitness and health clubs and roughly 185 million registered members worldwide (IHRSA (b), 2020). Based on a survey conducted by the European Commission, around 40% of participants stated to prefer parks and outdoor locations to perform physical activities. In contrast, only 5% engage in sports at university or school (European Commission, 2018).

### ***The German Fitness Market***

In the following, the German fitness market will be analyzed in-depth. Germany is selected as a pilot market for the business idea due to a large number of sport enthusiasts. The IHRSA ((d), 2020) report shows that Germany has the second-highest number of members at fitness and health clubs, including 11.66 million members as of 2019. Additionally, statistics show that Germany has the fourth highest fitness club density, with 9,669 fitness clubs in 2019 (IHRSA (e), 2020). On the revenue side, the fitness market in Germany generated revenues of €5,510 million, with a 17.23% growth in revenues from 2014 to 2019 (Deloitte, 2020). Both statistics indicate that the size of the German fitness market is continuously growing due to highly motivated sportive people and a vast majority of fitness clubs that seek to match this demand. Despite showing a high revenue volume in fitness clubs, the survey respondents only spent 7% on online services (website or apps) within the past 12 months (Statista Global Consumer Survey, 2020). Taking this into account, online services represent an underserved area within the general market landscape compared to the significant amount of digital native target groups

such as Gen Z (age 9-22) and Millennials (age 23-39). More specifically, Millennials represent the most dominant group in terms of fitness user demographics with 32.1%, followed by Gen Z with a 20.2% share (CB Insights, 2019).

A large part of the younger age groups among Gen Z and Millennials decide to study after school, which shows the great market size of this age group explicitly. Let alone in Germany, 54.8% of high-school graduates decide for university studies (Statistisches Bundesamt (b), 2020). As of 2021, Germany can record 2.9 million students (Statistisches Bundesamt (a), 2020) that are enrolled among 423 universities (Statistisches Bundesamt, 2021), partially private and public. German university sports are regulated through an overarching association, namely the "Allgemeine Deutsche Hochschulsportverband (ADH)", which manages the sport activities of over 202 universities and 2.4 million students. In addition to observing the sport offering of universities, the ADH offers national and international competitions, events and supports professional athletes (ADH, 2021). Although the board members of ADH aim to serve as central advisors, the respective universities must regulate their sports offering and manage transactional tasks such as membership payments.

## **2.2. Consumer Trends**

---

In order to understand the consumer behaviour of the respective fitness market, it is crucial to analyse the underlying trends that drive consumption patterns. Over the last five years, the rise of Gen Z and Millennial values (McKinsey, 2018), the importance of technology as a service (Statista E-services Report, 2020), and the penetration of shared economy concepts (PwC, 2015) have been a significant driver of consumer behaviour.

### ***Gen Z and Millennials***

When it comes to the fitness user demographics, both Gen Z (aged 9-22) and Millennials (aged 23-39) represent the most influential consumer groups, with 52.3% in the German fitness market (CB Insights, 2019). However, both consumer groups have unique traits that must be

considered. Gen Z consumers prefer service more than ownership, seek identification with the product, and pay increased attention to ethical concerns (McKinsey, 2018). In addition, products should be coupled with technological advances to enable a smooth user experience (McKinsey, 2018). Even though Millennials are often described as hopeful, relational, tech-savvy, and idealistic (Rainer & Rainer, 2011), this consumer group focuses more on the self (McKinsey, 2018). Both Gen Z and Millennials look for individualized products and are willing to pay a premium for personalization (2018). For example, Millennials are willing to pay a premium price for boutique studio memberships due to the community effect and the atmosphere of the classes (CB Insights, 2019). Despite the great representation of both consumer groups within the German fitness market, Millennials are statistically the more active consumers and also visit fitness and health clubs more often (Statista Global Consumer Survey, 2021); that is, 76% of Millennials exercising at least once a week (CB Insights, 2019).

### ***Technology***

In recent years, new technologies have transformed the fitness industry. E-services such as fitness wearables or fitness apps gained more popularity among users and turned into a \$16.8 billion industry (Statista E-services Report, 2020). Fitness wearables allow to measure and analyse certain body functions and physical activity. For example, an activity tracker may not only help to count daily steps and encourage users to be more active with more challenging goals and gamification functions but also monitor medical information such as the heart rate. Often, these wearables are used in combination with an application to gain more insights into the person's fitness level. Other applications can be classified into workout or nutrition apps, e.g. Freeletics that offers users different bodyweight exercises on the phone, or the diet focused app MyFitnessPal, which supports the individual in terms of calorie tracking and meal planning (Freeletics, 2021; MyFitnessPal, 2021). Given current trends such as the development of 5G and improved data networks, larger companies have engaged in mergers and acquisitions to

combine expertise and develop new products that are expected to enable more interactions between wearables and the Internet of Things (IoT) (Statista E-services Report, 2020). Recent examples include the German sportswear brand Adidas that acquired the running app Runtastic (Adidas Group, 2015) or the internet giant Google with the acquisition of Fitbit (Fitbit Blog, 2021).

### ***Sharing Economy***

Radical changes in consumer habits have led companies such as Uber or Airbnb to disrupt entire sectors with creative new business models. Within the *sharing economy*, users benefit from sharing capacities and resources on an on-demand basis and engage with mutual trust. Personal interactions and the sense of a community experience make the driving forces (PwC, 2015).

In recent years, more and more sharing economy concepts penetrated the fitness market. A leading example, ClassPass, offers users the opportunity to join classes at different fitness studios in exchange for a monthly fee (Yahoo Finance, 2015). Another start-up named Gympass instead focuses on a B2B approach through which corporates can offer their employees access to several fitness and health clubs at the same time (Gympass, 2021). Both concepts indicate the importance of on-demand variability and the concept of sharing resources.

### **3. Methodology and Research Question**

---

The market research was conducted to pursue two main objectives: to gain meaningful insights into the target market and validate predetermined assumptions and hypotheses regarding the proposed business model. The overriding *research question* is focused on the validation of the business opportunity. Based on the research question the following three hypotheses will be analysed: (1) University students lack a convenient way to find sport partners, (2) universities have mediocre sport offerings and lack digitalization, (3) university sports are unregulated, thus enabling easy access to the market.

For this purpose, a qualitative methodology was employed to collect information about the perception of students and the status quo of how universities currently offer sport activities. The primary sources of data were a survey and semi-structured interviews held with spokespersons of different universities. Complementary, further secondary data about competitors was collected from websites and articles.

The survey consisted of 31 questions, including both multiple-choice and open-ended questions, and was divided into five categories (personal information, sports activity level, motivation, status quo of university sports and the proposed business idea of Active Union). These sections allowed to gather a holistic overview of students' profile, personal preferences, and satisfaction or dissatisfaction with the current situation about the university sports offering. The interviews were conducted with a) spokespersons of universities responsible for handling sports-related matters and b) student unions, which are very well integrated inside universities and dispose of knowledge relating to this area. The main topics in each conversation were: *current sports offering, course instructors, sign-up and booking process, used tools and applications, partnerships, and payments*. Given the scope of the survey and the interviews, the main insights are highlighted in this section. For further information, refer to the Appendix 1&2. The following section may include key insights from gathered data to support claims.

## **4. Market Validation**

---

Throughout this work project, a combined methodology of qualitative and quantitative research was applied. In the following, the survey results (i.e. over 100 students) and semi-structured interviews (i.e. five representatives of universities) will be contextualized. Subsequently, the previously introduced set of hypotheses will be analysed and validated.

### **4.1. Survey Data Analysis**

---

The focus of the survey (see Appendix 1) is influenced by two demographic aspects: age and gender. Moreover, respondents had to indicate at which university they study, and in which

subject they are enrolled in. As the survey was built around interviewing students, the 101 participants were aged between 20 and 29 years. All age groups were clustered into three cohorts representing the relative percentage of respondents: 20-22 (25%); 23-25 (63%); 26-29 (12%). Even though such age distributions are expected at a university level, the lower number of participants in the older demographics may skew the analysis. The most significant respondents are between 24 and 25 years old, representing 50% of respondents.

Additionally, 56% of respondents are male, and 44% are female. This could lead to a similar weight of responses for both genders. Moreover, 36% of respondents are students from Nova SBE, whereas 64% study at different business schools in Europe, such as Maastricht University or Università Commerciale Luigi Bocconi. When it comes to the study area, 88% of respondents study in fields such as Finance, Economics, or Management.

### ***Sports activity level of university students***

When relating to different sport activities, many respondents (30 students) use fitness studios to complement other team sports or as their only sport activity. However, other sport activities taught in classes also have great importance for students – for instance, Football (28 students) and Running (28 students) are top-rated among respondents. If students engage in sports, they mostly do so around 3-5 times a week (77%), with 3 times per week being the most popular frequency (33%). Most of the time, participants identified the primary reasons for doing fewer sport activities as *lack of motivation*, *time constraints* or *need for recovery* after the session. In addition, both individual or group sport activities seem to be equally preferred, with 50% of respondents preferring individual or group activities. Going in-depth, participants emphasized the main reasons for group sports as a way to *meet new people*, having *more motivation*, *more fun*, and implicit *teamwork*. In contradiction, participants who preferred individual sport activities focus on *self-improvement*, *relaxation*, and *individual competition*.

To conclude, students almost equally prefer outdoor sport activities (53%) in comparison to indoor activities (47%). However, this statistic may be skewed as 37 of the respondents indicated Covid-19 as a primary reason to train more outdoors. Other reasons for outdoor training were mainly focused on *being in nature*. In times of no restrictions (i.e. Lockdown), most students indicated to prefer indoor sports due to the *provided equipment* and *independence of weather conditions*.

### ***Motivation behind sports activity***

Regarding the motivation behind sports, the consensus mentioned *being fit & healthy*, *finding balance*, and *looking good* as the main drivers. Out of the 101 responses, 70% stated they would do more sports if it were easier to find partners to do it with. 62% of participants are not willing to pay some money to find sport mates. On the other hand, the remaining 38% stated willingness to pay between 0.50€ and 40€.

### ***University sports offering***

In terms of the current sports offering at universities, 65% of all respondents stated dissatisfaction. The central answers on how to improve the situation included: *a more extensive offer in terms of the variety of sports and number of classes*, *a booking system that is easier to use*, *better coordination of the activities*, *a mobile application* and *competition events*. Regarding the student's willingness to pay, around 69% of respondents agreed to pay for sport classes at university. When it comes to the question how students connect with each other, the most frequent replies were through *group works and classes*, *parties*, or *social media*. Adding to that, around 88% stated that they would like to meet other students through sports.

### ***Mobile application for university sport activities***

When presenting the general idea of Active Union, 84% of participants indicated that they would use the mobile application. Respondents would like to see *gamification* (e.g. personal stats), *calendar schedule*, *chat with friends*, *courts booking*, *competition events* as prominent features. Most of the respondents would use the mobile application three times a week (34%).

Even though the mobile application would not replace a gym membership (80%), 53% of the students would be willing to pay for it. On average, students would pay 5€ for the mobile application, with 0.25€ being the minimum price and 30€ per month as the maximum price indicated.

## **4.2. Expert Interview Analysis**

---

The expert interviews' primary purpose was to better understand the current situation regarding the offer of different sport activities at universities while including both the perspective of students and universities. Each interview consisted of five main sections. When analysing the interviews, a thematic coding approach was utilized. After transcribing the interviews, similarities have been identified and matched by following the framework of thematic ideas (Gibbs, 2007).

The interviewees were José Maria Trindade, Head of Sports Office at Nova SBE's student union; Dr. Mischa Lumme, board member of ADH (Allg. Deutscher Hochschulsportverband) and representative of University Sports at University of Göttingen; Anna-Lena Fahl, Head of University Sports at University of Stuttgart; Chrisitan Burghahn, Head of University Sports at University of Mannheim; Christian Mundhenk, Director of University Sports at FU Berlin.

### ***Current sports offering***

The offering of sport activities can vary from different clubs (i.e. running club, surf club, yoga club) to sport courses (i.e. yoga etc.) (E1-E5). However, only some of the German universities offer the opportunity to book sport courts within the general website. In addition, the German universities provide further training for coaches with a potential license (E2-E5). Often the universities have specific competition teams, which train regularly. To complement current trends, some universities also have e-sports teams showing the diversity of the sports offering (E1-E5). At Nova SBE, the student association (Nova SU) manages the sports offering and overlooks the university's budget (E1).

In contrast, German universities are under the supervision of a German sports association (ADH), which regulates 202 universities in Germany. However, there is a large gap between the quality of the offering of university sports (E2-E5). The quality of the sports offer not only depends on the demand of the students for sport activities but also on the strength of the community (E2). To cope with the situation of Covid-19, all German universities offer online courses through Zoom or other online tools (E2-E5).

### ***Course instructors***

As means to offer high-qualified classes, most German universities seek to have licensed trainers for certain sports (E2-E5). However, some sport activities do not require licenses due to the newness of the sports activity (i.e. e-sports). When it comes to Nova SBE, trainers are only offered for the competition teams (E1). The payments for courses are generally aligned to market prices (E2).

### ***Sign-up and booking process***

When it comes to the sign-up process, Nova SBE offers try-outs at the beginning of the year for the competition teams (E1). For German universities, there is a two-sided model for students: On the one hand, students can pay a monthly fee to access introductory courses (i.e. 2.20€), and on the other hand, pay for some classes with qualified course instructors (E2). The sign-up for the membership works through the website, which very often has a rigid user experience (E2-E5). Participants receive an email after signing up for the courses (E4). Bookings are then processed and managed through an administration software named *Buchsys*.

### ***Used tools and applications***

With regards to tools and applications, most German universities are relying on the administration software *Buchsys*. While each university varies in terms of website design and general sports offering, *Buchsys* functions as a back-end solution and is adapted accordingly by the university. Nevertheless, interviewees confirmed that the design is not very appealing and that a user-friendly mobile application would be great to have. WhatsApp groups as a form of

communication are only used in unofficial ways (i.e. group members of a particular team) since an official use would raise concerns regarding data security. Other than that, each university tends to administrate various social media channels around different classes to connect with students and distribute news.

### ***Partnerships and payments***

Most of the interviewed universities have partnerships with sport facilities (i.e. Nova Surf Club) or different sport venues (i.e. Tennis Courts) to provide a holistic sports offering. Larger universities such as the University of Göttingen even own some sport facilities (E2), while other German universities must share and rent public facilities (E3-E5). In general, university sports are financed through membership fees with little extra money from public funding (E2). Some universities also cooperate with other universities when it comes to their offering: For instance, the University of Mannheim collaborates with the University of Heidelberg and DHBW Mannheim to offer these students to participate in sport activities (E4). Often, universities such as the FU Berlin also close partnerships with sponsors such as insurance companies, banks, or different associations (E5).

As a result of the interviews, Nova SU, University Göttingen, and University Stuttgart expressed interest to work with a software provider that could implement a mobile application with a seamless interface (E1, E2, E3). However, such a software solution must comply with the data security standards of the university and at the same time be complementary to the back-end solution of *Buchsys*.

### **4.3. Validation of Hypotheses**

---

Based upon the initial market validation with the realized insights from the survey, the interviews, and the secondary data, one can conclude an opportunity in the market as previously assumed by the three hypotheses.

First, it was assumed that students lack a convenient way to find sport partners (Hypothesis 1).

The conducted survey confirmed that students are not fully satisfied with the current process of booking classes and wish for a more convenient way to connect with fellow students.

Second, the market research indicated that universities have mediocre sport offerings and lack digitization (Hypothesis 2). The majority of students in the surveys complained about the lack of sufficient variety in terms of classes to choose from. As evident from the expert interviews, representative spokespersons confirmed the lack of digitization in the field and expressed a desire for a user-friendly mobile application to offer to students.

Third, the university landscape seemed unregulated from an outside perspective, thus enabling easy access to the market (Hypothesis 3). However, after conducting the expert interviews, the consensus of all respondents showed that, especially in Germany, the sports association (ADH) strictly regulates the sports offering. Therefore, the business idea should be aligned with current regulations from national sport regulations and seek partnerships.

To conclude, two hypotheses (Hypothesis 1, Hypothesis 2) were successfully validated through the survey and expert interviews, showing great market potential for a business idea in the university sports landscape.

## **5. The Business Idea**

---

As a result of the formerly stated market validation and hypotheses, there is evidence of several underlying pain points, both at the side of the students' perspective as well as for universities.

In the following, evident pain points and a possible solution will be further described.

### **5.1. Pain**

---

To begin with, the expert interviews (see Appendix 2) indicated that universities are currently lacking a seamless way to offer and manage the bookings of sport activities. The status quo suggests that some universities only show available sport classes on a static website, and the majority have no mobile solution for the students. Since there are differences between both private and public universities, budget constraints appeared to play an important role, as

interviewees mentioned a lack of financial resources to hire and sustain an individual IT team that is only dedicated to handling matters such as the organization and offering of classes via a mobile application or a sophisticated website. Another issue mentioned by universities was the difficulty of finding suitable coaches for certain classes.

Regarding survey results (see Appendix 1), the consensus agreed that many are not well informed about the general offering of classes and disappointed with the available offering. Additionally, the sense of a community was lacking. Individuals often desired to find more like-minded students to do sport activities together but had no convenient way of doing so. This was equally reflected by students who mentioned the hardship of connecting with other students outside of class and group projects. As pointed out by representatives of the Students Union of Nova SBE, most coordination efforts for sport activities usually occur within WhatsApp groups, which has not been viewed as a very satisfactory solution.

## 5.2. Solution

---

"Active Union" – connecting through sports.

At its core, Active Union represents a mobile application that allows students to easily book sport classes offered at the university (online and offline). Students can find other sport partners and reserve equipment or book pitches. Through a web platform, universities can digitize their sports ecosystem and straightforwardly handle administration. Considering the market validation and current consumer preferences, Active Union incorporates features that solve the pain points mentioned above and bring several advantages for (1) students and (2) universities. When it comes to the benefits for students, Active Union developed features around the need to connect with sport partners conveniently. First, the application enables *instant & seamless communication* as students can quickly contact fellow students and connect with members of their team or group. Second, users can *reserve slots* to book football pitches, tennis courts, or

*reserve equipment* like surfboards. Third, it is possible to *find sport advocates and experts* through guided sessions from fellow students and experts on the intranet.

Regarding the pain points around universities' lack of sports offering and digitalization, Active Union's features provide great value through a desktop version focusing on analytics for universities. To begin with, Active Union seeks to provide an *all-in-one ecosystem* through which universities can coordinate and administrate all sport activities on one platform. Next to that, a *competition and event planner* allows universities to manage competition teams and plan upcoming events. Thirdly, the opportunity for universities to *forecast their budget* adds additional value as they can collect data and improve forecasting for future demand through intelligent analytics.

## **6. Market Analysis**

---

This chapter will analyse potential competitors within the fitness industry to get an in-depth overview of the target market. In the following, different customer personas will be identified that could be targeted. To conclude, potential partnerships are illustrated that are crucial for the growth of the venture.

### **6.1. Competitors**

---

In order to get a holistic overview of the competitive landscape, potential competitors have been clustered. Within each cluster, 2-3 comparable competitors were chosen to get a grasp for each segment. For competitors, the three different clusters have been identified – that is (1) *Access Passes*, (2) *Online Coaching* and (3) *Fitness Studios*. In addition, a clustering analysis was conducted to position Active Union within the competitive landscape (Kaufman & Rousseeuw, 2005). Given the fact that at the moment there is no competitor who is directly selling a mobile application service to universities, only indirect competitors with an alternative business model and solution were considered.

## *Competitors*

Regarding competitors, three different clusters have been identified that each address a different type of value proposition to customers within the fitness market segment. The characteristics of each competitor are summarized and listed in Appendix 3.

To begin with, the value offering of *ClassPass* can be categorized into the cluster of a business model which functions as an *Access Pass* (ClassPass, 2021). The company distinguishes itself by offering a two-sided marketplace that attracts both studio users and end-users to its platform and features in-studio classes, salon & spa appointments, and access to digital classes without any restrictions in terms of contracts or serious commitments. The prices start at 12€ for 1 to 2 classes up to 49€ per month with the option to attend 5 to 12 classes. According to the Apple app store rating, the general user satisfaction is very high. A potential downside of the business model may be a high churn rate once users find an ideal class. Founded in 2013 and backed by a Series E funding of \$549.1 million with 43 investors involved, ClassPass can be considered an established player (Crunchbase ClassPass, 2021).

Another company of this cluster, similar to ClassPass, is *Gympass*. By offering a platform that empowers companies to engage their workforce in physical activity by providing access to the largest global network of workout facilities, *Gympass* follows a B2B approach and is only accessible when the company has a paid partnership (Gympass, 2021). Equally as ClassPass, *Gympass* also features various studio memberships, live classes, and corporate wellness programs within its diverse network. Depending on the number of the desired available partners, prices range between 10€ to 80€ a month. Similar to ClassPass, *Gympass* was founded in 2012 and is backed with a Series D funding of \$300 million. One of their most vital financial partners is Softbank Vision Fund, which supports its long-term vision (Crunchbase *Gympass*, 2021).

While being relatively new to the market, *Eversports* follows a similar approach by also providing access to different classes and venues, however, focused on local establishments, which also includes the option to reserve courts and pitches (Eversports, 2021). Compared to the other two companies, Eversports' price range is higher, with a starting price set at 65€, up to a maximum of almost 200€ monthly. When it comes to funding, the company only generated a Series A funding of \$10.5 million since founded in 2013 (Crunchbase Eversports, 2021).

The second cluster can be considered as a form of *Online Coaching*. *Actio*, also a new start-up in the space, follows a new approach to accountability, where coaches will call clients via video calls and offer personalized sessions in real-time (Actio, 2021). The application includes more than 100 daily classes for fitness, yoga and meditation through various trainers for an affordable price starting at 2.40€ per session. Although the offering is still limited to these three categories, the app's first users tend to like the new concept of personalized guidance. Concerning the holistic value proposition, Actio could already gain Seed investments of €10 million since 2019, including lead investors such as Heal Capital, HV Capital, and Cavalry Ventures (Crunchbase Actio, 2021).

Backed by a robust global community, the *Freeletics* brand gained popularity with easy-to-follow bodyweight workouts with no required equipment (Freeletics, 2021). Also offered in an app format, the company sells memberships for online training videos and semi-customized training and nutrition plans through artificial intelligence. For as little as 10€ per month, users get access to the digital coaching and are also satisfied, based on the app store rating of 4.8 stars on iOS devices and 4.3 stars on Android. The high-growth business model with low capital intensity could attract a Series B funding of \$70 million (Crunchbase Freeletics, 2021).

Another company in this cluster, similar to Freeletics, is *Thenx*. Originally founded by YouTube content creator Chris Heria, the application offers customized programs and technique guides focused on calisthenics (Thenx, 2021). What stands out is the exclusive community feeling of

Thenx, which is also reflected in the overall (excellent) app store ratings. Even though the application is slightly more expensive than Freeletics, it can be still clustered as affordable, starting with 9.99\$ per month (Thenx, 2021).

With new technologies uprising in the fitness industries, *Vaha* can stand out by offering a large-scale mirror with guided assistance to enable the correct execution of exercises through personal training (Vaha, 2021). Besides to guided training, live classes and 200 on-demand workouts can be offered. The product is targeted within the higher price segment as users have to pay an initial fee of 2268€ and an additional monthly membership for 39€ (Vaha, 2021). The start-up is still expected to show high growth potential in the seed round and backed by VCs such as HV capital and Global Founders Capital (Crunchbase Vaha, 2021).

The third cluster can be identified as *Fitness Studios*. *Fitness Hut* is one of the biggest commercial gyms in Portugal and positions as a low-cost gym with basic equipment for an affordable price of 19.99€ per month (Fitness Hut, 2021). One of the major disadvantages comes with the limitation of equipment and crowded space. The acquisition of Fitness Hut by VivaGym shows the mainstream potential of this concept (Fitness Hut Crunchbase, 2021).

Contrary to the low-cost approach of the vast majority of gyms, *Holmes Place* is a premium gym offering personal training and high-level wellness and spa experience. However, such an offering comes with a premium price starting at 69.9€ per month (Holmes Places, 2021). Even though the company was founded in 1979, the model of premium gyms still has growth potential, which can be noted through recent investments by Armada Credit Partners, Alantra, and Explorer Investments (Crunchbase Holmes Place, 2021).

### ***Cluster Analysis***

For the market landscape, potential competitors have been conceptualized (see Appendix 4), that is, products or services that could be viewed as an alternative for engaging in sport activities. The illustration of Appendix 4.1 aims to categorize different value propositions

within clusters, which will help understand the positioning of Active Union in the market. The driving dimensions for the comparison were the price point (the higher spectrum considered as *premium* and the lower end as *affordable*) and secondly, whether the product or service is offered *online* or *offline* (in person).

The first cluster of *Access Passes*, including Gympass and ClassPass, can be located in the average price segment. Both business models offer the opportunity to book online offerings and in-person classes with a slight focus on the offline business. Companies such as Vaha and Eversports positioned in the second cluster *Online Classes* are somewhat in the premium segment focusing on an online offering of classes. The second cluster of *Online Coaching* emphasizes online classes as the only touchpoint with trainers. While community-based companies such as Thenx and Freeletics are relatively affordable, new start-ups such as Actio are found in the medium price segment. Lastly, the third cluster of *Fitness Studios* is instead focused on offering offline services such as an equipped gym and personal training. However, when it comes to pricing, this cluster is very dispersed, with low-cost gyms (i.e. Fitness Hut) and premium gyms (i.e. Holmesplace) being on the opposite pricing position of the spectrum. Taking into account the positioning of competitors, Active Union demonstrates a unique opportunity in the market landscape. With the opportunity to book face-to-face classes and reserve pitches on the go, the application is a perfect mixture that combines online features (e.g. gamification) and develops an offline connection between students. With that in mind, Active Union positions in the average price segment for students due to the coverage by the university.

Building upon the results of the quantitative and qualitative research and complementary to the first conceptualization, another overview (Appendix 4.2) was created. The dimensions for the map are the integration of the product or service within the university ecosystem (the higher spectrum considered as *university-integrated* and the lower end as *non-integrated*) and

secondly, whether the product or service is offered as a *social* activity or for *individual* activities. With the product vision in mind, the second map depicts Active Union's unique value proposition as the only solution that is integrated into the university ecosystem. The service aims towards increasing the social connectivity of university students. Owing to the distinctive positioning in the market, Active Union believes to have a unique competitive advantage. First, the service will be the first of its kind to the market for a mobile sports application for students. Secondly, the application will be highly user friendly and functional. Lastly, having studied at several universities before, the founder team disposes of a great student network and the expertise to acknowledge which product features will likely be demanded by users.

To accompany the cluster analysis, the competitive advantage is also shown by analysing the strengths, weaknesses, threats, and opportunities (SWOT analysis) of Active Anion (see Appendix 4.3).

## **6.2. Customers**

---

In order to showcase different use cases of final end-users of the mobile application, three different customer personas have been created on the basis of the interviewee's properties (see Appendix 5). First, the highly active sport fanatic person that does sports almost every day of the week (see Appendix 5.1). Second, an individual that is an expert in one specific sport activity and would like to help others to improve (see Appendix 5.2). Third, a user that is outgoing and travels often to meet new people (see Appendix 5.3.).

To conclude, Active Union targets 18-25-year-old students who could be described as fitness-conscious for different sports and eager to meet new people in an exclusive network.

## **6.3. Partnerships**

---

The partnership landscape will be analysed in the following chapter, based on four clusters with different magnitude (see Appendix 6). The clusters are defined as (1) sport venues, (2) sport

associations and organizations, (3) sport and nutrition brands, and (4) corporates and governments.

First, partnerships with sport venues will be crucial to enable the booking of pitches and to offer sport activities that are not included within the university ecosystem. As indicated by some interview participants, there is often a shortage of sport facilities for the university, meaning that it could be beneficial to include external venues that are bookable for students as well. Next to local facilities and venues, local businesses and sport shops like boxing clubs or a surf shop is also included in this cluster next to local facilities and venues.

The second cluster contains sport associations and organizations that serve as a potential foundation for collaborations. On the one hand, there are student unions that are deeply connected inside the university space. Owing to network effects, a partnership could be beneficial to accumulate fast user growth and carry out promotional activities. On the other hand, sport associations (e.g. ADH) being the overarching institution of several universities would also allow gaining insights on processes and internal organizational structures quickly.

The third cluster can be defined as partnerships with sport and nutrition brands. These companies can improve their marketing efficiency due to the precise nature of the Active Union user base through data analytics. Supplement and nutrition brands (i.e. MyProtein, Foodsprings), healthy restaurants (i.e. Honest Greens) and sportswear brands (i.e. Nike, Gymshark, etc.) can easily target the user base with paid ads that are displayed on the Active Union application. In addition, several exclusive partnership opportunities can be executed: For instance, the gamification feature within the mobile app could present an opportunity for students to win specific prizes from brand partners if they achieve a certain level. This would increase brand awareness of the brand and, at the same time, increase the motivation of students to continuously participate in challenges.

The fourth cluster focuses on partnerships with governments. When it comes to governments, Active Union can potentially apply for various subventions and grants as the business idea supports sport activities within the educational sector.

## **7. Product**

---

Based on the competitive market analysis and previously defined and interviewed user groups, the product design will be further described in this chapter. In the following, the product design approach will be executed through a wireframe walkthrough created on Figma (Appendix 7).

### **7.1. Product Design**

---

In order to design a seamless user experience for the application, it is crucial first to define the approach that will ultimately drive the customer journey. Due to the practical nature of application design, various UX design case studies were analysed as a basis for the Active Union user experience (i.e. Tibrewala, 2018). First, the result of the competitive market analysis plays a role in the positioning of the Active Union app and for which values it should stand for. The application should represent a convenient and visually appealing method to offer university students a way to book sport activities and courts online, while universities can analyse the students' data. Hence, the solution should entail a mobile version for students, complemented by a desktop version for universities. Second, user segmentation plays a significant role in approaching the app design. As the customer segment was defined between 18- and 25-years old students, it was identified through the interviews which difficulties this target group faces that should be converted into main features (see Appendix 1). Third, wireframes were created based on the information above through the tool Figma (see Appendix 7). To illustrate the user experience, the next chapter will give a clear walkthrough of the customer journey, as visualized by the wireframes.

## 7.2. App User Interface

---

As previously described, the Active Union solution includes both a mobile application for students (Appendix 7.1 and 7.2) and a desktop version for universities with analytical features (Appendix 7.3). Therefore, this chapter will cover both wireflows.

### *For Students*

To begin with, the home screen will allow the user to sign up on Active Union. This first section gives an animative description of the features of the app and space to explore. From the home screen, the user also can get to the "Join Friends" section. Within this section, the user gets a preview of the classes that friends are currently signed up for, with the possibility of expanding the list into a complete overview of classes from every friend. Each class will also include a short description, with the specific time of the class, as well as the location. Moving on to the second tab, "Search", the user has the opportunity to browse through all the categories of classes that the university has to offer. In order to give the user a seamless and straightforward application experience, each category will entail further sub-categories. On the booking section, which is accessible at the bottom of the search page, students will be welcomed with an overview of previously booked venues or used equipment to give them the option of quickly booking it again. This frame will also show other teammates from previous activities, which will make it easy for the players to connect. At the bottom of the screen, there will be a list containing all available pitches, courts and equipment, which allows for quick reserving. On the next tab, the app will feature a calendar function, including an overview of booked events and a planning tool with a quick phone integration of the users' phone calendar. Within the preview of the upcoming events, small details such as the time, location and course instructors are included. To also give the students the possibility of maintaining conversations, the penultimate section offers both private and group chats for members. The group chats, including club chats, will allow the instructors to contact all the class participants quickly.

Furthermore, clubs can be established as an expert group, where members that are trying out new sports can get quick help with all sorts of doubts that may arise. The last section is dedicated to the user profile. A short bio can highlight individual preferences and indicate the age of the user and the study program. Next to that, the profile section will also give hints about a user's progress, particularly the activity level, the total hours completed, and a level indicating a rang. With these gamification aspects, users are incentivized to participate in more activities, as a higher score will allow them to redeem the coins for things like fresh juices, snacks, a healthy meal, or other goodies provided by partner institutions or the university.

### ***For Universities***

With the analytical overview at hand, the university can execute various functions integrated into the sidebar. To begin with, the "Analytics" section allows the university to have an individualized overview of basic user information (i.e. address information), total students enrolled in the university and how many of them actively use the Active Union ecosystem. In the following, the university can analyse user stats on a weekly, monthly, or annual basis. The standard setting of analytical "user stats" includes the following charts: The "average activity level" result shows how often students participate in activities on average and helps to improve forecasting activities. To complement this statistic, the following chart shows how many trainings are done per week to enforce the activity level. In order to better forecast the court bookings, the "court capacity" chart illustrates on which days the courts were often booked; the user has the opportunity to switch the type of court (i.e. Football, Tennis etc.). Due to the importance of user satisfaction, the "course reviews" chart measures the students' satisfaction with classes. In addition, the "most popular activities" are also ranked, whereby the university can set a focus on specific sports activities.

Coming back to the sidebar, the university can initiate "events" at the campus, such as competitive football events and invite selected students to this event. As a next tool, the

university can administrate the students in the tab "Data" to have an overview showing which students are active users. To emphasize the customization of the desktop version, the tab "settings" allows the university to individualize the user stats and display statistics. To conclude, the feature "History" enables universities to receive weekly updates for improved data analysis.

The second portion of the analytics dashboard focuses on two adjustable highlight sections. The upper block features the generated revenue through booked classes, which will help the university understand demand patterns throughout the year. The second part gives an overview of the total demand for various classes, which will allow the university to make better estimates about more popular and less popular classes. With these insights, administrative tasks such as staffing trainers or adjusting the available offer towards the student's preferences will become easier. The right area of the screen will be a complementary highlight section, giving the university more diverse insights such as the total change in new members or predictive statistics related to forecasted revenues. Both the revenue and the demand forecasting section will be adjustable to understand the difference between online and offline activities.

## **8. Marketing**

---

The next chapter will outline three different clusters of target customers (universities). Based on the characteristics of those universities, pricing models will be applied as a basis for the business model. In accordance with the target customers, branding and marketing strategies will focus on paid and organic marketing. For a detailed description of figures, please refer to the financial section (see Appendix 10).

### **8.1. Target Segments**

---

Active Union's customer base comprises different types of universities (both public and private) and mostly range in size, measured by the number of active users. The lower spectrum entails universities that have up to 500 active students enrolled. These universities are expected to

make up a smaller share of the customer portfolio (around 20%) and are likely to have a very high churn rate. This is due to the small number of enrolled students, which will cause smaller network effects within the ecosystem. At the same time, smaller institutions are also likely to have fewer financial resources and less willingness to spend money to improve the sports ecosystem.

The next target segment focuses on a medium number of active students (up to 1000) and is expected to come with a relatively low churn rate while making up around 30% of the portfolio. With a more extensive student base, the possibility of reaching more potential users is higher, thus creating more significant network effects and potentially more active users.

The universities with larger user bases will be the leading target group of Active Union, making up the largest share of customers in the portfolio (60%). With more than 2500 active students, these institutions will be the primary source of revenue, with more extensive financial resources and higher willingness to pay. Equally, as the medium-sized universities, the churn rate will ideally be lower due to the impact of a more extensive network and a bigger community.

Since the active users were the distinguishing factor in determining the pricing model, a more thorough description is also included in the financial section.

## **8.2. Pricing & Positioning Strategy**

Active Union aims to offer an alternative to regular gyms and other designated sport clubs. Due to the limited budget of universities, Active Union positions itself with a flexible pricing solution.

Researchers in the field of pricing strategies (Jobber & Shipley, 2012) illustrate that market-oriented pricing is an efficient framework for B2B pricing. More specifically, it is crucial to determine the customers' willingness to pay and increase the price depending on the brand, design, and function of the solution (Jobber & Shipley, 2012).

Considering the willingness to pay of university students, the surveys showed that such students would either pay nothing for university sports or pay less than an online coaching app such as Freeletics (i.e. monthly fee of 10€). Therefore, the rationale behind the pricing model is to offset the risk of putting off potential customers by a high initial purchase price and instead focus on a payment model for universities (B2B) that would take over the monthly payment of university students.

The following pricing model will be based on three pricing segments – that is high-, medium-, and a low number of active users. The advantage of such a *fair use* model ("pay-as-you-go" framework) lies in the concept of customization, as universities with a higher number of active users would pay more (Simon Kucher, 2018). Additionally, universities will face the three pricing models and psychologically create an anchor price with the cheapest pricing version. Universities are invited to start with the lowest pricing model to analyse the demand and can easily switch to a membership model to meet the demand for more active users afterwards.

Universities with many active users (>2.5k users) would pay a monthly fee of 0.50€ per student, namely 1.250€. Second, universities with a medium number of active users (>1k users) will pay around 1.000€ per month considering the fee of 0.50€ per student. Third, universities with a low number of active users (>500 active users) would be charged 250€ per month.

### **8.3. Branding & Advertising Strategy**

---

When it comes to Active Union's branding and advertising strategy, the goal is to focus on paid and organic marketing activities, including online and offline campaigns. As visible in the financial section, the first two years with the IT development and launch of the service will incur high costs. Therefore, it will be essential to achieve fast growth within the initial phases to combat costs and to also leverage network effects between universities, for example, through the power of word of mouth and collaboration events such as competitive tournaments. The starting point will be to focus on reaching the first ten customers that love our product, and

Active Union will begin this phase with an initial MVP pilot conducted at Nova SBE. The pilot will test essential functions (including A/B testing) and enable to gather further feedback, which can later be implemented for the launch of the main application. While implementing the service of Active Union at new universities, the marketing & sales team will pay special attention to develop a long-lasting relationship with student representatives- or ambassadors, unions, and clubs. Since all are deeply involved within the university sports space, the connection may serve as an effective channel to accelerate the growth of a large user base through sending internal emails or sharing posts on the respective social media channels that most students usually follow.

### ***Organic Marketing***

The building block of Active Union's marketing strategy will be organic marketing, which is intended to follow a value-based and authentic approach to reach customers. The vision that the brand aims to convey is to create a lasting and fundamental shift within the university sports landscape, which should incentivize people to connect more with each other through sports.

For inbound activities, several initiatives will be implemented. To begin with, creating a blog with weekly posts will educate both universities and students about product features, fitness, and nutrition tips, thus driving more traffic to the website. Secondly, social media channels will be built up to give Active Union platforms to scale up a community and raise more awareness among students. This will also include promotional posts within student communities such as Facebook groups or sport-based forums. Thirdly, Search Engine Optimization (SEO) tools will be implemented to optimize content and pages for further growth. Through the landing page (see Appendix 8) that conveys the value proposition, initial leads will be collected via a sign up to schedule a product demo and facilitate interactions with potential customers. In order to measure organic marketing efforts, key metrics will include organic traffic, leads & sales, traffic, and the format of the sources that drive the most traffic to the website (Salesforce, 2018).

Additional to the online activities, Active Union will also emphasize local offline marketing in the given target areas, which will be accomplished by attending job fairs, promotional events and distributing ad banners within universities. Benefitting from the power of word of mouth, students generally tend to be very open towards trying new things while also being very keen to engage in a broad range of sports. Above all, they spread the word quickly. Whether students among their peers or alumni beginning to build rapport with colleagues, creating positive, meaningful messages worth sharing is one of our key marketing targets. In addition to the universities, it is also planned to collaborate with local sport clubs and stores. This could begin with retailers or training institutes such as local football clubs. Both options can serve promotional activities and acquiring new users.

### ***Paid Marketing***

Given the fact that there is currently no alternative solution on the market, "pushing" marketing actions will be necessary to gather more attention and to present the service directly to customers. Therefore, to complement organic marketing activities, Active Union will also utilize paid marketing services to target, reach, engage and convert the customers in a quick way (Salesforce, 2018). This tactic will be based on achieving a good return on investment, hitting sales targets, optimizing different ads, as well as testing campaigns, all measured by engagement and conversions. Next to performance marketing, Active Union will also rely on dedicated sales employees to drive growth by continuously acquiring new universities.

Since the branding experience is one of the most significant distinguishing factors for customers today, developing an authentic and emotional connection with the community is crucial, thus being one of the top priorities of the marketing team.

### ***Budget***

In terms of budget, the marketing expenditures for the first year have been set to approximately 130,000€. Taking the development of the application and the necessary resources for scaling into account, this budget was considered as required. Around 60% will be spent on organic

marketing activities, and the remaining 40% on paid campaigns. For the next phase, the expansion within the German market, a cumulative budget of around 700,000€ was calculated. During this period, social media channels will continue to play a critical role. With increasing revenue and more budget, it will also be possible to tap into influencer marketing – a powerful tool in the shed of the modern marketer, when targeting large audiences. In this case, influencers in the sport and health segment currently studying can serve as our brand ambassadors and attract and retain a large customer new base, who may see our brand as a means of getting closer to their favourite influencer.

Fitness fairs are a melting pot for sports-avid people and, thus, offer a unique opportunity to generate general awareness. Once Active Union reaches a higher number of customers, community events can be organized to develop and establish a sense of culture and to nurture our community of like-minded people further. Closing the loop to our solution, some of the features serve as marketing measures on their own. For instance, the application will also entail the gamification features with a reward system to foster consistent user engagement, which lets users win vouchers for local snacks & drinks, vouchers of popular sport brands, or tickets for sport events.

The year 2026 will entail an anticipated marketing budget of around 2,000,000€. This will be invested into the international expansion of the service or also allow to make commercials with professional athletes. Depending on the situation and the financial needs of the company, the grown user base by then will enable to introduce mobile ads to the platform. This can provide local businesses with a space to promote products and services while also leveraging location-based data nearby. Taking this idea even further, more prominent sport brands could be attracted by offering direct access to target audiences and customer personas of different sport fanatics on the platform. Active Union would essentially offer a pre-segmented customer base with a

significantly higher probability of conversion to brands and thus embody an unfair advantage versus traditional social media.

## **9. Operations**

---

The operational activities show a roadmap (see Appendix 9) of the future processes and the development of the business model. Therefore, goals and objectives are clearly defined, which will drive the operational process. The operational process will be separated into a pre-launch phase and a post-launch phase. To conclude, the practical roll-out plan will be outlined.

### **9.1. Operational Goals & Objectives**

---

Active Union aims to deliver on its operational goals and objectives. To achieve this, the methodology of the Lean Start-up approach will be followed. This approach is based on the idea that the business model of a start-up is built on a set of hypotheses, which would never survive the initial contact with a customer. However, by following this method, start-ups can mitigate risks to decrease the probability of failure (Ries, 2011). In order to succeed, the approach consists of several practices, such as an iterative build-measure-learn principle to experiment quickly, minimal viable products (MVP's) and measuring data in a scientific way to validate different hypotheses.

The business model strives to deliver a resilient mobile application that can be used by a large number of users at the same time with a seamless user experience. Moreover, Active Union seeks to incorporate user feedback to improve the user experience continuously. This requires solid initial app development and diligent continuous data management. In order to fulfil these goals and objectives, it is crucial to set up a concrete operational road map for the next five years.

## 9.2. Operational Process

---

### *Pre-Launch and Pilot (2021)*

*Scope:* Active Union will develop a first pilot for Nova SBE that can be used at the beginning of the Fall Semester 2021. Nova SBE was chosen based on various reasons: First, the two founders (Luca Mack and Sebastian Bormann) are well connected within the network of Nova SBE. Second, the founders interviewed the student union (Nova SU) and already received confirmation for the pilot project (see Appendix 2, E1). Moreover, the survey results of Nova SBE students showed great interest in such an app (see Appendix 1). Third, Nova SBE is an excellent environment for such an application due to the lack of digitalization for competition clubs (i.e. volleyball, fun, football) and sport clubs (i.e. Running Club, Surf Club). In addition, the connected communication will drive the usage of the application.

*Personnel:* When it comes to the pre-launch (2020), Active Union plans to recruit programming talent to develop a highly functional mobile application. Therefore, a third founder with full-stack programming skills will be recruited to develop further the prototype based on the existing wireframes. The front- and back-end IT knowledge will join forces with the management knowledge of the two initial founders.

*App Development:* The app development will follow the Lean Start-Up framework to get the product faster to the customer (Ries, 2011). By repeating the cycle of (1) idea generation (usability tests) followed by (2) coding and (3) data usage (e.g. customer interviews), the application will be customer-centric and functional from the very beginning of the actual launch in 2022. More specifically, after generating ideas regarding the interface through wireframes (*ideas phase*) (see Appendix 7), the full-stack software developer will create the first version of the application (*coding phase*). It is then of utmost importance to test the newly developed app in the setting of early adopters/pioneers. This allows for visible bugs to be fixed and enable a smooth interface (*data phase*). Afterwards, Active Union would reach the beta phase, where the platform would be tested under the usual operating conditions of one university (>1k

students). By creating the pre-release of the mobile application, the first users can already find their sport activities from the very beginning and start to test the application's usability. This would give Active Union several feedback loops to iterate from different user groups (see Appendix 5) to check the necessary adaption before the release in 2022. Overall, Active Union would apply a "build, measure, learn, feedback loop", which incorporates testing the feedback of users (Ries, 2011). In case of unexpected resonance of the students, a pivot (i.e. rethink the overall strategy and the lessons learned above) could be considered. Alternatively, the application would persevere, and another sprint would be executed.

*Data Maintenance:* Due to the number of users from the very beginning (e.g. 1k students), Active Union plans to collaborate with a cloud computing company (e.g. AWS) to secure highly valuable information, the data of the users. As the data is susceptible (e.g. phone numbers, location, pictures etc.), it is crucial to have the expertise to deliver on the promise of data security. In the first year of launch, the IT costs will be relatively high due to the initial set-up (approx. 65,000€) (see Finance Part). To prepare for technology-based obscurities, Active Union intends to implement a CRM System (e.g. Hubspot) to stay as close as possible to the customer. This kind of software allows to automate various marketing actions and to deal with customer requests, such as addressing surfacing bugs or other urgent issues.

### ***Launch and Post-Launch (2022-2026)***

*Scope:* Active Union will launch in Germany as the first country. As previously shown in the market analysis, Germany is highly active in the university sports sector and would be a highly suitable target area for the first launch. Several reasons played a role to choose Stuttgart as the first city to target: As a consequence of the expert interview with Uni Stuttgart (see Appendix 2, E3), Active Union recognized the need for a mobile application in Stuttgart. Additionally, Stuttgart represents one of the largest university networks in Germany (Studis Online, 2020) with a good sports offering that still lacks digitalization (see Appendix 2, E3). Active Union

seeks to target 10 out of 27 universities in Stuttgart in the first year of launch (2022), representing the customer base of the year 2022. That translates into a Serviceable Available Market (SAM) of 37.0%. Active Union expects an exponential growth of 150% in year 2, 100% in year 3, and 150% in year 4, compared to the customers reached at the end of the previous year. In the three following years (2023, 2024, 2025), Active Union plans to target 200 universities in total out of 426 universities in Germany. This results in a Total Addressable Market (TAM) of 46.9% in Germany and a revenue of around €4 million. By expanding into the biggest cities in Germany, such as Berlin, Cologne, Munich and Frankfurt, this growth can be achieved.

In the fifth year of operating (2026), Active Union implements an internationalization strategy, targeting 300 new international universities, which leads to 500 universities in total and revenue streams of up to €10 million. The main focus will be on business schools in metropolitan areas such as the UK, France, Italy and Spain that contain a high number of students. Even though this will imply a high initial investment compared to the initial launch, Active Union will reach a significant number of new customers and increase sales much faster.

*Personnel:* For the next four years (2022-2025) and hence the German expansion, the number of employees continuously increases to 16 employees (see Finance Plan), leading to an increase in salary expenses. The increase of employees, revenue and user base in the year 2022 has to be backed up by a sound organizational structure: In the year 2022 (10 employees) up to the year 2025 (16 employees), Active Union should be structured into different business units to allow project and task delegation (separate Marketing, Sales, Finance, IT, and HR department). When it comes to the structure, it is crucial to set a focus on software developers (approx. 30% of employees) and salespeople (approx. 30% of employees) as it is vital for a start-up to focus on building a great product as well as engaging in frequent sales situations to gather feedback and ultimately achieve a great product-market fit. After setting up the fundamental

organizational structure within the first four years (2022-2025) and continuously increasing the customer base, Active Union plans the international expansion in 2026, which leads to a simultaneous increase in salary expenses with 29 employees on board (see Finance plan). By now, the organization should emphasize developing a good work environment and culture that reflects the company's values (e.g. open office space that enforces the connection between people) and attracts talent that represents the brand image. From the year 2022 onwards, Active Union moves into collaborative workspaces, which will increase the office rent expenses (see Finance Part).

*App Development:* After developing the pilot in 2021 and testing previous versions, the product is developed and ready for commercialization (2022, Go Live). During the following years (2022-2026), the developers are mainly responsible for implementing continuous development improvements for the front- and back-end experience.

*Data Maintenance:* While the number of users steadily increases, Active Union needs to adapt the server capacity. Moreover, the IT costs in the following years (2022-2025) of 13,000€ are mainly based on app maintenance. Still, in the year 2026 and in line with the expansion strategy, the IT costs and the data maintenance increase up to 32,500€.

## **10.The Numbers**

---

### **10.1. Customer Lifetime Value (CLV)**

---

Customer lifetime value predicts the net profit a single customer can generate from his initial acquisition throughout the entire future relationship with the firm. In general terms, this model is regarded as more of a hands-on approach to display expertise, market knowledge and, ultimately, a more well-reasoned game plan to potential investors – particular for start-ups. The prediction of the critical metrics can vary in accuracy and sophistication, depending on the underlying analyses' complexity.

To build a reasonable CLV, the different customer personas' characteristics were translated into average order value (AOV), annual purchase frequency (APF), churn and customer acquisition cost (CAC). Revenue streams are captured through the acquisition of paying universities, to begin with by collecting fees for the use of the application and at a later stage eventually also through offering ad placements. To better understand the following figures, please refer to the Financials section in the appendix.

### ***Key metrics of B2B customer personas***

As mentioned previously, customers will be categorized by the number of active users (see appendix 10.1). Please refer to Appendix 10.2 for the detailed portfolio representation of each Persona.

The group with a high number of active users (>2.5k users) is projected to represent around 60% of the portfolio. For this customer group, an average order value of 1,250€ has been estimated. The rationale behind the figure was to assume that around 10% of all students will use the service, with a theoretical price per student of 0.5€. Considering the value proposition and the respective price point of competitors, the price per student seems very reasonable for what the app will offer in terms of functionalities. Regarding the average purchase frequency, 12 months per year have been assumed, whereas around 10% of customers are expected to abandon the service (churn rate). The overall customer acquisition costs (CAC) of 520€ have been calculated by dividing the marketing expenses (year 1) with the acquired customers (year 1). Based on this CAC mean value of 520€ and the characteristics of the customer personas, the total CAC for the first customer segment will equal around 800€. Since this group generates the most revenue and accounts for 60% of the portfolio, it has the highest CAC assigned.

While accounting for 30% of the portfolio, the medium group with more than 1,000 users is expected to generate an AOV of 1,000€, also with an average purchase frequency of 12 months. Compared to the first group, the medium tier segment has been calculated with a churn rate of

15%, assuming that a few more customers will stop using the service. The CAC of 500€ is oriented closely towards the average (520€).

The customer segment geared to lower numbers of active students is expected to represent around 20% of the portfolio, with an average order value of 250€. Presuming that some customers in this segment may encounter difficulties in fully utilizing network effects to accumulate a high active user base, a slightly higher churn rate of 30% has been determined. Given these characteristics, the lowest customer acquisition cost of 250€ have been assigned.

### ***CLV Projection***

Regarding the customer lifetime value projection, the calculation is based on the initial target of acquiring ten customers (see Appendix 10.5). The resulting margin per year per customer equals 6,951.28€ (high number of users), 5,561.08€ (medium number of users) and 926.84€ for customers with a low number of active users (see Appendix 10.3). While projecting figures through a five-year time span, the average five-year CLV yields to 28,466.20€, 20,623.80€ and 2,570.21€, respectively. Referring to the prior mentioned CAC of 800€, 500€ and 200€, CAC multiples total to 35.58€, 41.25€ and 10.28€. The final CLV/CAC ratio amounts to 35.

### ***Revenue Projection***

Speaking of revenue, the estimated figures per year per customer yield to 15,000.00€ (high users), 12,000.00€ (medium users) and 2,000.00€ (low users). Taking into account the estimated customer growth, average purchase frequency, average order value and churn rate, total revenues of 130,000.000€ (year1), 634,400.00€ (year2), 1,858,470.00€ (year3), 4,236,570.50€ (year4) and 10,231,863.63€ (year5) have been estimated (see Appendix 10.4).

## **10.2. Profit & Loss Statement**

---

The profit and loss statement, or income statement, summarizes the revenues, cost and expenditures incurred during a specific period (Investopedia (a), 2021). In the case of Active Union, the analysis is for six consecutive years (2021-2026) to reflect the year of setup (2021)

followed by five years of scale (2022-2026). The P&L statement helps to understand the company's projected financial performance. Please refer to Appendix 10.6 for the detailed Profit and Loss statement and Appendix 10.9 for the employee count.

When analysing the P&L Statement of Active Union, one should consider the year 2020 as a setup year before the initial launch of the application. In general, the expenses have been divided into fixed costs and variable costs.

Two positions are displayed under the category fixed costs, namely office rent and insurance. *Office rent* has been calculated with the assumption of 20 square meters per person \* 15€ per square meter \* number of employees \* cost for electricity, water, cleaning etc. Position *insurance* refers to general liability insurance, which application developers pay per year for coverage up to €1 million (Truic, 2021). Active Union pays 600€ per year.

Variable costs are divided into marketing costs, salaries, IT costs and legal fees. Especially before the roll-out of our application, it is crucial to calculate enough money for *marketing activities* to ensure our application's general awareness. Using a typical range of 6-12% as a guideline, Active Union will spend 20% of the projected revenue generated in the first year of operating (2021) (Baremetrics, 2021). The marketing budget is then scaled down slightly for the years following the launch (2022-2025). Active Union will scale down to 12% of the projected revenue, which is still considered the top percentage according to research (Baremetrics, 2021). In the year 2026, including the international roll-out, the marketing budget will be increased again to 20% due to the roll-out to additional countries (Appendix 9). In general, *Organic Marketing* will have allocated 60% of the marketing budget due to the importance of building an authentic community through content marketing and Social Media channels. The remaining marketing budget of 40% will be allocated to *Paid Marketing* activities.

*Salary* consists of two parts, namely the amount paid to the employees (Sales, Marketing, Finance, Software Development, Human Resources) and the amount paid to the founders. The

developers will be paid 50,000€ per year, which is more than the average in Europe (Kononchuk, 2020). By undertaking this step, Active Union seeks to attract qualified developers rather than just junior developers and ensures that the core capability is in good hands. For the first three years (2021-2023), the founders will be paid 20,000€ per year according to Portuguese salary standards. This salary is enough to live and demonstrates commitment towards the investors. In the following years (2024-2026), the founders' salary will increase up to 70,000€, respectively. For other departments (Sales, Marketing, Finance, and HR), a yearly salary will be paid that is adapted to the Portuguese market, paying from around 18,000€ to 20,000€.

*IT costs* represent the cost for building the application as well as maintenance, service, and future adjustments. Consequently, the IT costs are exceptionally high in the first year where the application is built. According to research, a medium complex application will cost around 65,000 following a feature-based estimation (Oozou, 2021). In the following years, IT costs would decrease to 20% of the initial costs (Chomko, 2012). Another variable cost that needs to be taken into consideration is the *legal fees*. The first-year legal fees are 500€ per month, which was assumed to increase to 5% of the projected revenue to a maximum of 120,000€ per year.

As mentioned before, 2020 marks the year of the setup. Consequently, Active Union does not book any revenue this year. In the following years, one can see revenues through the application sales with the three pricing models (high, medium, and low level of active users).

From the year 2024 onwards, taxes come into play since this is the first year where profits are anticipated. Since the target market is Germany, a tax rate of 30% was applied (Trading Economics, 2020). The year 2024 will also be the first year where Active Union can present a positive net income. Net income is expected to increase exponentially to more than 4 million in the year 2025.

Profit Margin needs to be evaluated according to the industry and business. As indicated before, the profit margin of 46% (as an average for profitable years 2023-2026) leads to a CLV to CAC ratio of 35:1, which indicates that acquired customers provide 35 times the value in revenue over the lifetime in comparison to the acquisition costs of this customer.

### **10.3. Cash Flow & Investment Proposal**

---

The cash flow statement provides aggregate data about all cash inflows as well as all cash outflows over a certain period. Besides, one can see where the cash comes from, usually through operations, investments, or financing. With the help of the cash flow statement, investors can determine the value of the company as a whole (Investopedia (b), 2021).

While analyzing the cash flow statement (compare Appendix 10.7), one can see that Active Union aims to raise a total investment of 1 million euro. It is improbable to receive the target investment at once – therefore, investments were divided over the first three years with 500,000€, 300,000€ and 200,000€, respectively. During the setup year 2020, each founder will also invest 10,000€ to underline commitment (compare Appendix 10.8). After the third year of operating, a positive net cash amount will be reached, which is expected to increase to more than 4,800,000€ in 2026.

## **11. Conclusion**

---

The goal of the work project was to develop and validate a business idea that solves the pain of a lacking sports culture at universities. The analysis is primarily based on surveys with students, expert interviews were conducted with universities. The primary data validates the demand that is shown by paying customers (universities) and active users (students). Complementary to primary data, secondary data in the form of the market analysis show the unique market gap for a product that enables a sports culture similar to what the universities represent in the United States. To conclude, the research has shown that the idea has the potential to turn out to be successful.

### ***Critical Success Factors***

The concept of Active Union as a *university sports ecosystem* platform was initiated by the authors in accordance with the problems shown in the conducted research. The product was developed to target the defined customer personas. However, the business must achieve certain critical success factors: First, it is crucial to *develop an MVP* and test the solution with different features, potentially at Nova SBE. Second, *initial user traction* is of utmost importance to gain the confidence of customers and ultimately, to convince more universities of the solution. Third, a structured approach to *business development* will be a critical factor to close deals with more universities in times of expansion. Finally, *funding* through different investors (i.e. angel investors, VCs etc.) will be important to expand to other markets successfully.

### ***Limitations***

In the end, risks always must be considered when it comes to disruptive business ideas. One of the main risks is the potential hesitation of universities to implement a new software solution as it would require changes to the IT system for sport bookings. In addition, universities could have a low willingness to pay due to budget constraints, although the aforementioned risks may potentially be mitigated through great user traction with the MVP. Due to the limited time span of the work projects (3 months), only a verbal agreement regarding the prototype with Nova SBE has been reached. With more time and a sufficient budget at hand, the authors could have taken the created wireframes (see Appendix 7) as a basis and started to build a first version of the mobile application. Another potential limitation may be found in the conducted survey, as the respondents were mainly business students from Portugal and Germany. Next to that, the expert interviews may also not be sufficient to draw comprehensive conclusions, since participants were only based in Germany and Portugal.

The financial analysis projections prove the great potential of the concept. As a limitation, such forecasts are always based on assumptions and estimates; therefore, figures could vary in a practical setting. More specifically, it was challenging to find the adequate pricing range for

customers as each university vastly differs in terms of resources and offers. Additionally, Covid-19 could impose another obstacle as restrictions and the planned vaccination process may vary within each country. When it comes to the P&L, certain costs (i.e. building, electricity) could always vary, which would ultimately change the forecast of the cashflow and the year in which Active Union will be profitable. Ultimately, the investment proposal always depends on the willingness of investors to provide the needed funding.

### *Avenues for further Research*

As a recommendation for further avenues, one could further build on the suggested wireframes of the prototype and test the MVP at different universities. Here it will be crucial to gain customer feedback and implement it in the mobile application. Going in depth, more surveys with a diverse range of students from different majors and expert interviews with more universities (>100) could help to successfully validate the business opportunity for different countries. As mentioned in the rollout plan, it is recommended to first target Germany and develop the opportunity in this geography. Of course, different markets in Europe could also be targeted as part of the expansion strategy. To complement such efforts, the business model could be validated not only for widely recognized sport activities (i.e. Football, Yoga), but also seasonal activities such as winter sports. On a final note, it would be interesting to see if the business model could work also for corporates.

As a long-term vision (next five years) the developed white-label product of Active Union could change the way sports is done at European universities and vastly improve the university life of students through sports.

## List of References

---

- Actio (2021). *Homepage*. [Online] Available at: <https://www.actio.com/en/> [Accessed 05.03.2021].
- ADH (2021). *Arbeits und Aufgabenfelder des ADH*. [Online] Available at: <https://www.ADH.de/ueber-uns/fakten.html> [Accessed 03.03.2021].
- Adidas Group (2015). *Adidas group acquires runtastic*. [Online] Available at: <https://www.adidas-group.com/en/media/news-archive/press-releases/2015/adidas-group-acquires-runtastic/> [Accessed 11.03.2021].
- Baremetrics (2021). *How to create a marketing budget for your startup*. [Online] Available at: <https://baremetrics.com/academy/how-to-create-a-marketing-budget-for-your-startup#:~:text=While%20there%20is%20no%20set,of%20gross%20or%20projected%20revenue> [Accessed 11.03.2021].
- CB Insights (2019). *12 Industries that will thrive thanks to Millennials*. [Online] Available at: [https://www.cbinsights.com/research/report/millennials-industries-thriving/?utm\\_source=CB+Insights+Newsletter&utm\\_campaign=b1bead9eac-newsletter\\_general\\_Sat\\_20190907&utm\\_medium=email&utm\\_term=0\\_9dc0513989-b1bead9eac-92834393#fitness](https://www.cbinsights.com/research/report/millennials-industries-thriving/?utm_source=CB+Insights+Newsletter&utm_campaign=b1bead9eac-newsletter_general_Sat_20190907&utm_medium=email&utm_term=0_9dc0513989-b1bead9eac-92834393#fitness) [Accessed 12.03.2021].
- Chomko, R. (2012). Maintaining an app is critical to its overall success. [Online] Available at: <https://www.fiercewireless.com/developer/maintaining-app-critical-to-its-overall-success#:~:text=The%20industry%20norm%20for%20software,That%20may%20sound%20expensive> [Accessed 08.03.2021].
- ClassPass (2021). *Homepage*. [Online] Available at: <https://classpass.com/> [Accessed 01.03.2021].
- Crunchbase Actio (2021). *Organization*. [Online] Available at: [https://www.crunchbase.com/organization/actio-401c/company\\_financials](https://www.crunchbase.com/organization/actio-401c/company_financials) [Accessed 09.03.2021].
- Crunchbase ClassPass (2021). *Organization*. [Online] Available at: [https://www.crunchbase.com/organization/classpass/company\\_financials](https://www.crunchbase.com/organization/classpass/company_financials) [Accessed 06.03.2021].
- Crunchbase Eversports (2021). *Organization*. [Online] Available at: [https://www.crunchbase.com/organization/eversports/company\\_financials](https://www.crunchbase.com/organization/eversports/company_financials) [Accessed 04.03.2021].
- Crunchbase Fitness Hut (2021). *Organization*. [Online] Available at: <https://www.crunchbase.com/organization/fitness-hut> [Accessed 01.03.2021].
- Crunchbase Freeletics (2021). *Organization*. [Online] Available at: [https://www.crunchbase.com/organization/freeletics/company\\_financials](https://www.crunchbase.com/organization/freeletics/company_financials) [Accessed 01.03.2021].

Crunchbase Gympass (2021). *Organization*. [Online] Available at: [https://www.crunchbase.com/organization/gympass/company\\_financials](https://www.crunchbase.com/organization/gympass/company_financials) [Accessed 13.03.2021].

Crunchbase Holmesplace (2021). *Organization*. [Online] Available at: [https://www.crunchbase.com/organization/holmes-place/company\\_financials](https://www.crunchbase.com/organization/holmes-place/company_financials) [Accessed 12.03.2021].

Crunchbase Vaha (2021). *Organization*. [Online] Available at: [https://www.crunchbase.com/organization/vaha/company\\_financials](https://www.crunchbase.com/organization/vaha/company_financials) [Accessed 01.03.2021].

Deloitte (2020). *European Health & Fitness Market Report 2020*. [Online] Available at: <https://www2.deloitte.com/content/dam/Deloitte/de/Documents/consumer-business/European-Health-and-Fitness-Market-2020-Reportauszug.pdf> [Accessed 01.03.2021].

European Commission (2018). *Share of people who engage in sport or physical activity in the European Union (EU) in 2017, by gender and location*. [Online] Available at: <https://www-statista-com.eu1.proxy.openathens.net/statistics/599274/eu-share-of-people-who-do-sport-physical-activity-by-gender-and-location/> [Accessed 01.04.2021].

Eversports (2021). *Homepage*. [Online] Available at: <https://www.eversports.de/> [Accessed 01.04.2021].

Freeletics (2021). *Homepage*. [Online] Available at: <https://www.freeletics.com/en/> [Accessed 31.03.2021].

Fitbit Blog (2021). *Fitbit ist jetzt Teil von Google*. [Online] Available at: <https://blog.fitbit.com/de-2021-update/> [Accessed 01.03.2021].

Fitness Hut (2021). *Homepage*. [Online] Available at: <https://www.fitnesshut.pt> [Accessed 01.03.2021].

Gibbs, G. R., (2007). *Thematic coding and categorizing*. London: SAGE Publications.

Gympass (2021). *Gympass Homepage*. [Online] Available at: <https://site.gympass.com/web/de> [Accessed 01.03.2021].

Holmesplace (2021). *Homepage*. [Online] Available at: <https://www.holmesplace.com/pt/pt> [Accessed 01.03.2021].

IHRSA (2019). *Market size of the global health club industry from 2009 to 2019*. [Online] Available at: <https://www.statista.com/statistics/275035/global-market-size-of-the-health-club-industry/> [Accessed 01.03.2021].

IHRSA (a) (2020). *Health club industry revenue worldwide from 2009 to 2019, by region*. [Online] Available at: <https://www.statista.com/statistics/273065/total-revenue-of-the-health-club-industry-worldwide/> [Accessed 01.03.2021].

IHRSA (b) (2020). *Members of health and fitness clubs worldwide*. [Online] Available at: <https://www-statista-com.eu1.proxy.openathens.net/statistics/275065/members-of-health-and-fitness-clubs-worldwide/> [Accessed 01.03.2021].

IHRSA (c) (2020). *Total number of health clubs worldwide*. [Online] Available at: <https://www.statista.com/statistics/275056/total-number-of-health-clubs-worldwide/> [Accessed 01.03.2021].

IHRSA (d) (2020). *Number of members at health & fitness clubs in 2019, by country*. [Online] Available at: <https://www-statista-com.eu1.proxy.openathens.net/statistics/252933/leading-markets-of-the-health-club-industry-worldwide-by-number-of-members/> [Accessed 01.03.2021].

IHRSA (e) (2020). *Number of health clubs worldwide in 2019, by country*. [Online] Available at: <https://www.statista.com/statistics/252922/leading-10-markets-of-the-health-club-industry-by-number-of-clubs/> [Accessed 05.03.2021].

IHRSA (d) (2020). *Total revenue of the health club industry worldwide*. [Online] Available at: <https://www-statista-com.eu1.proxy.openathens.net/statistics/273065/total-revenue-of-the-health-club-industry-worldwide/> [Accessed 03.03.2021].

Investopedia (a) (2021). Profit and Loss Statement (P&L). [Online] Available at: <https://www.investopedia.com/terms/p/plstatement.asp> [Accessed 01.03.2021].

Investopedia (b) (2021). Understanding the Cash Flow Statement (P&L). [Online] Available at: <https://www.investopedia.com/investing/what-is-a-cash-flow-statement/> [Accessed 01.03.2021].

Jobber, D. and Shipley, D. (2012). Marketing-orientated pricing: Understanding and applying factors that discriminate between successful high and low-price strategies. *European Journal of Marketing*, 46(11/12), pp. 1647-1670.

Kaufman, L. & Rousseeuw, P. (2005). *Finding Groups in Data: An Introduction to Cluster Analysis*. New Jersey: John Wiley & Sons, Inc.

Kononchuk, E. (2020). *Average Software Developer Salaries: Rates Comparison by Country*. [Online] Available at: <https://qubit-labs.com/average-software-developer-salaries-salary-comparison-country/> [Accessed 09.04.2021].

Mckinsey (2018). *'True Gen': Generation Z and its implications for companies*. [Online] Available at: <https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/true-gen-generation-z-and-its-implications-for-companies#> [Accessed 01.03.2021].

MyFitnessPal (2021). *Homepage*. [Online] Available at: <https://www.myfitnesspal.com> [Accessed 13.03.2021].

Oozou (2021). *Estimate My App*. [Online] Available at: <https://estimatemyapp.com> [Accessed 01.03.2021].

Porter, M. E., (2008). *The Five Competitive Forces That Shape Strategy*. Harvard Business Review.

PwC (2015). *Sharing or paring? Growth of the sharing economy*. [Online] Available at: <https://www.pwc.com/hu/en/kiadvanyok/assets/pdf/sharing-economy-en.pdf> [Accessed 03.03.2021].

Rainer, T. S., & Rainer, J. (2011). *The Millennials*. Nashville: B&H Publishing Group.

Ries, E. (2011). *The lean startup: How today's entrepreneurs use continuous innovation to create radically successful businesses*. New York: Currency.

Salesforce (2018). *The Difference Between Paid and Organic Marketing – and Why It Matters*. [Online] Available at: <https://www.salesforce.com/blog/paid-organic-marketing-strategy-blog/> [Accessed 17.04.2021].

Simon Kucher (2018). *The 5 Pricing Models Companies Need to Consider When Innovating*. [Online] Available at: <https://www.simon-kucher.com/de/blog/5-pricing-models-companies-need-consider-when-innovating> [Accessed 20.04.2021].

Statista E-Services Report (2021). *Fitness – Worldwide*. [Online] Available at: <https://www-statista-com.eu1.proxy.openathens.net/outlook/dmo/eservices/fitness/worldwide> [Accessed 19.03.2021].

Statista Global Consumer Survey (2020). *Which of the following fitness and health services have you spent money on in the past 12 months?*. [Online] Available at: <https://www.statista.com/forecasts/998796/fitness-and-health-service-purchases-in-germany> [Accessed 08.03.2021].

Statista Global Consumer Survey (2020). *Which of the following fitness and health services have you spent money on in the past 12 months?*. [Online] Available at: <https://www.statista.com/forecasts/998796/fitness-and-health-service-purchases-in-germany> [Accessed 05.03.2021].

Statista Global Consumer Survey (2021). *Frequency of visiting the gym among millennials in Germany in 2020, compared to the population*. [Online] Available at: <https://www.statista.com/statistics/977338/gym-visiting-frequency-millennials-germany/> [Accessed 17.04.2021].

Statistisches Bundesamt (a) (2020). *Anzahl der Studenten an deutschen Hochschulen*. [Online] Available at: <https://de.statista.com/statistik/daten/studie/221/umfrage/anzahl-der-studenten-an-deutschen-hochschulen/#professional> [Accessed 22.04.2021].

Statistisches Bundesamt (b) (2020). *Entwicklung der Studienanfängerquote*. [Online] Available at: <https://de.statista.com/statistik/daten/studie/72005/umfrage/entwicklung-der-studienanfaengerquote/> [Accessed 20.03.2021].

Statistisches Bundesamt (2021). *Hochschulen in Deutschland nach Hochschulstart*. [Online] Available at: <https://de.statista.com/statistik/daten/studie/247238/umfrage/hochschulen-in-deutschland-nach-hochschulart/> [Accessed 02.04.2021].

Studis Online (2020). Die größten Studentenstädte, Unis und Hochschulen 2020. [Online] Available at: <https://www.studis-online.de/Studieren/studentenstatistik.php> [Accessed 02.03.2021].

Thenx (2021). *Thenx Homepage*. [Online] Available at: <https://thenx.com> [Accessed 03.03.2021].

Tibrewala, N. (2019). *A mobile app for complete fitness – UX case study*. [Online] Available at: <https://uxdesign.cc/fitterme-mobile-app-case-study-3d707104dce5> [Accessed 16.03.2021].

Trading Economics (2020). *Germany Corporate Tax Rate*. [Online] Available at: <https://tradingeconomics.com/germany/corporate-tax-rate> [Accessed 05.04.2021].

Truic (2021). *Business Insurance for App Developers*. [Online] Available at: <https://howtostartanllc.com/business-insurance/business-insurance-for-app-developers> [Accessed 01.04.2021].

Vaha (2021). *Vaha Homepage*. [Online] Available at: <https://vaha.com> [Accessed 15.04.2021].

Yahoo Finance (2015). *'Sharing economy' hits the gym with ClassPass*. [Online] Available at: [https://finance.yahoo.com/news/sharing-economy-meets-fitness-revolution-at-classpass-152210132.html?guce\\_referrer=aHR0cHM6Ly93d3cuZ29vZ2x1LmNvbS8&guce\\_referrer\\_sig=AQAAAMDZl0tfdK4GM1Ma9QYC-fLGxwBlaNRv9nbgD4bZeScLWOGvnxAPYGpin0rGHviVVFxqlosS7TMA4r2w6h5Akv5LKXDIELTvC9Eso3j4dNjY-TjcPXBb4EjELhMKt6lkN54\\_BHtComK8r4utM86GjVCQTEGCraaAGXTw2Xq7os3w&gucounter=2](https://finance.yahoo.com/news/sharing-economy-meets-fitness-revolution-at-classpass-152210132.html?guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2x1LmNvbS8&guce_referrer_sig=AQAAAMDZl0tfdK4GM1Ma9QYC-fLGxwBlaNRv9nbgD4bZeScLWOGvnxAPYGpin0rGHviVVFxqlosS7TMA4r2w6h5Akv5LKXDIELTvC9Eso3j4dNjY-TjcPXBb4EjELhMKt6lkN54_BHtComK8r4utM86GjVCQTEGCraaAGXTw2Xq7os3w&gucounter=2) [Accessed 17.03.2021].

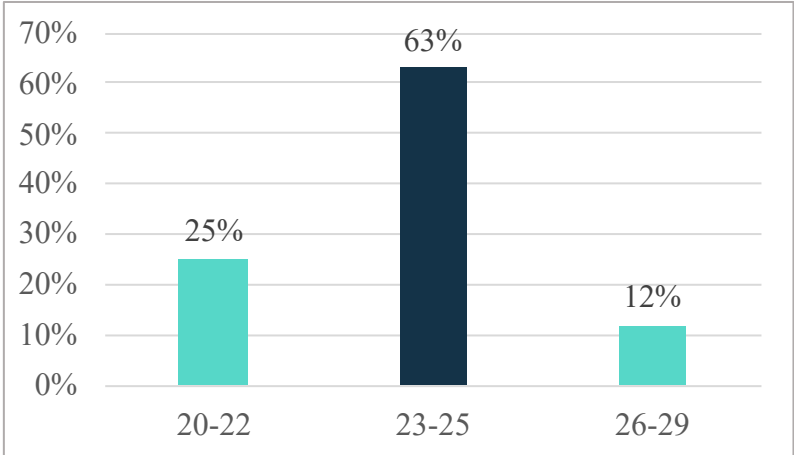
**Appendices**

---

*Appendix 1: Survey Results*

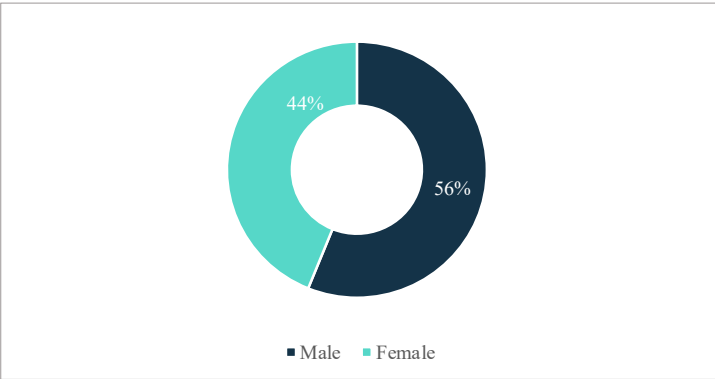
**Section 1: About you**

**Question 1: How old are you?**



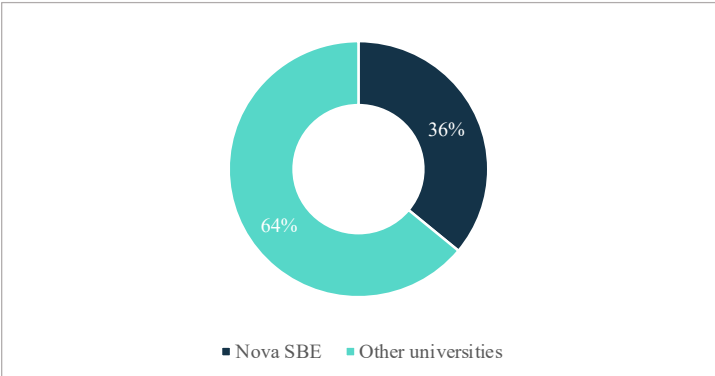
Total count: 101 responses

**Question 2: What is your gender**



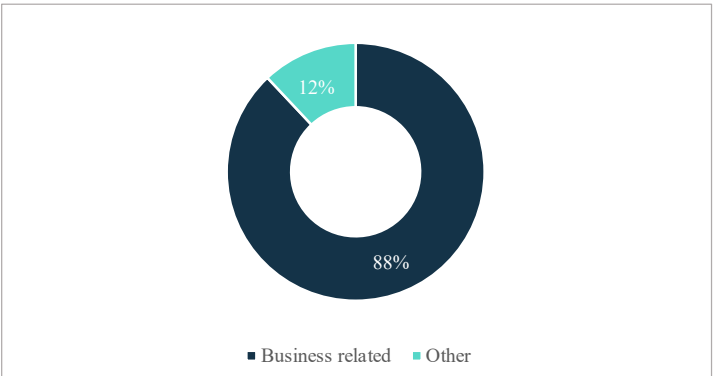
Total count: 100 responses

**Question 3: Where do you study (university)?**



Total count: 101 responses

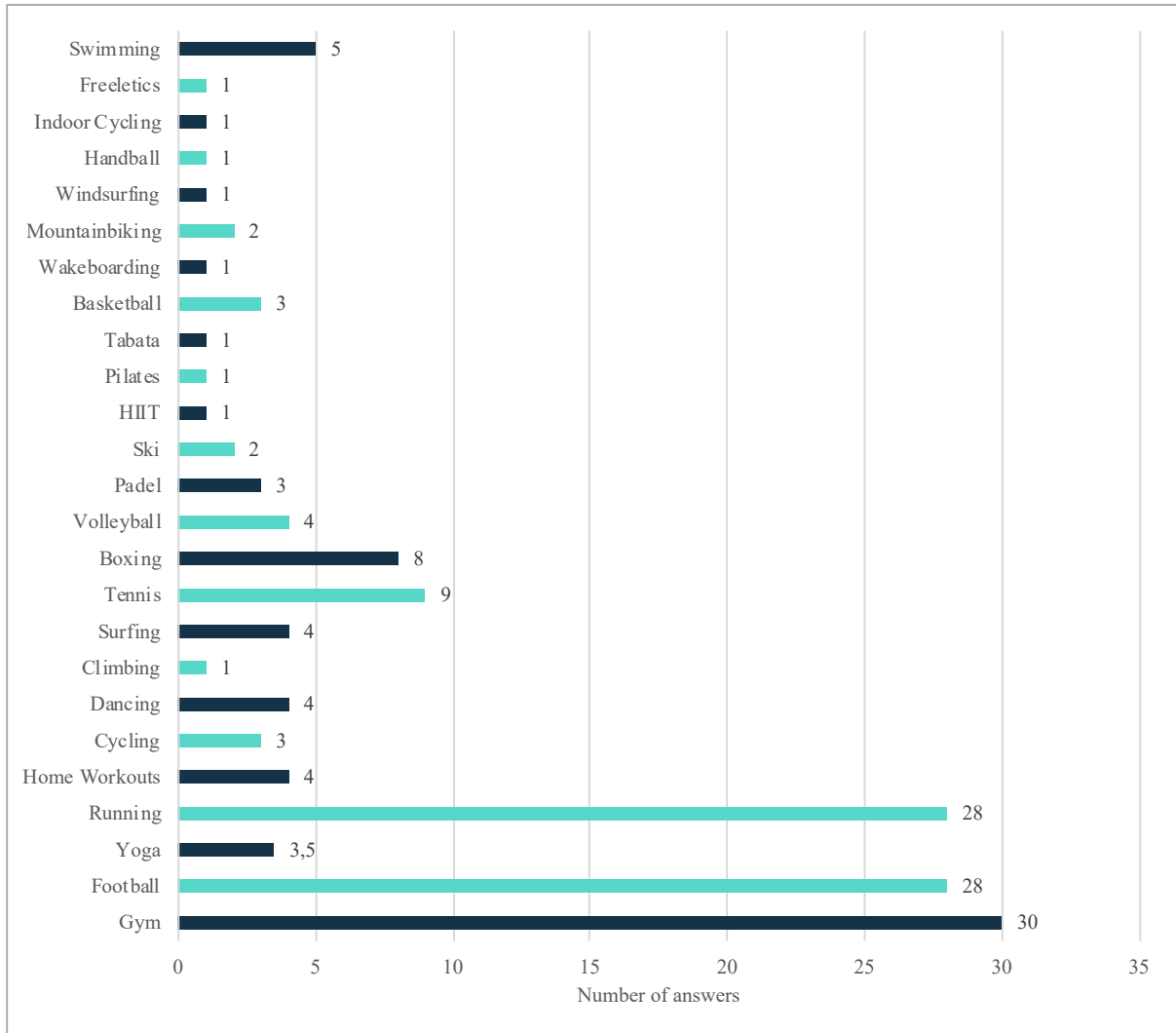
**Question 4: What do you study?**



Total count: 101 responses

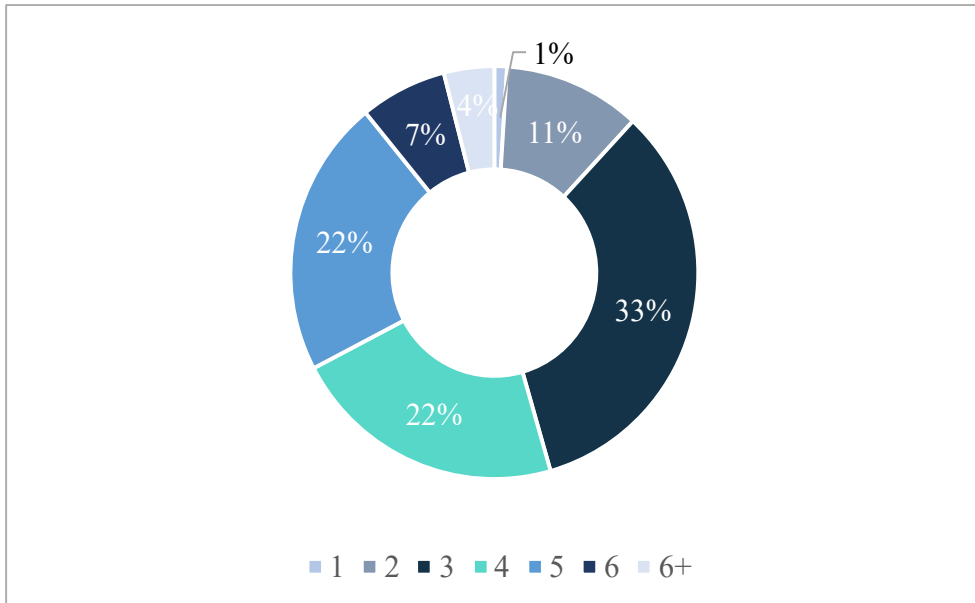
## Section 2: Sport Activity Level

### **Question 5: What kind of sport activities do you like and actively participate in?**



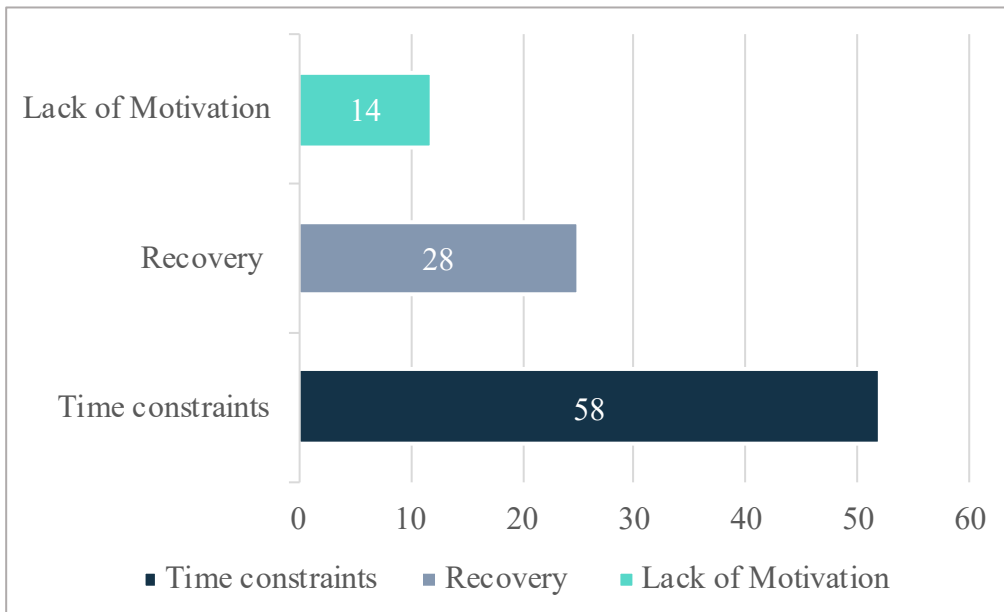
Total count: 101 responses

### Question 6: How often per week?



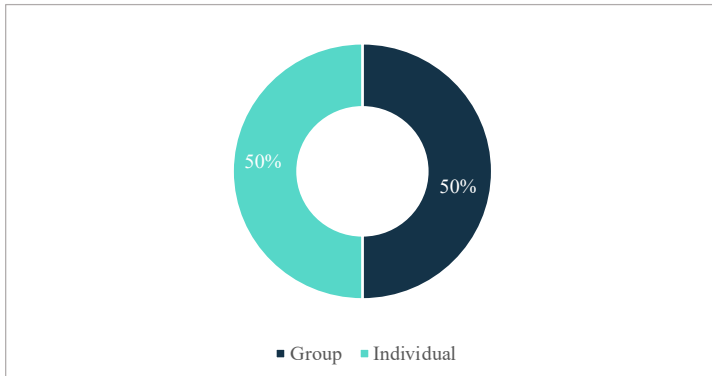
Total count: 101 responses

### Question 7: Reasons why not more often?



Total count: 96 responses

### Question 8: Do you prefer individual or group sports?



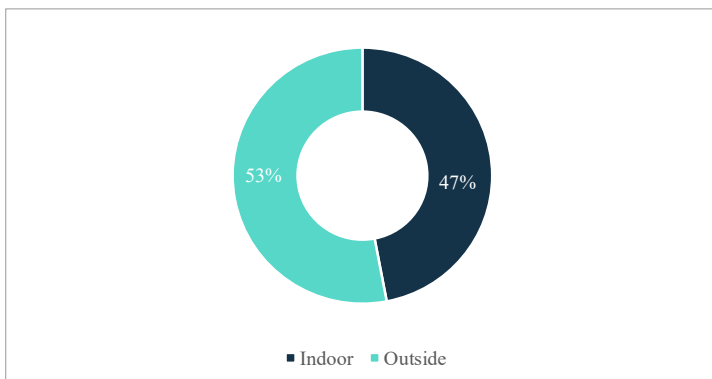
Total count: 100 responses

### Question 9: Why do you prefer individual / group sports?

**Most common answers:** Reasons for group sports: Meet new people, more motivation, more fun, competition / Reasons for individual sports: self-improvement, relaxation, individual competition

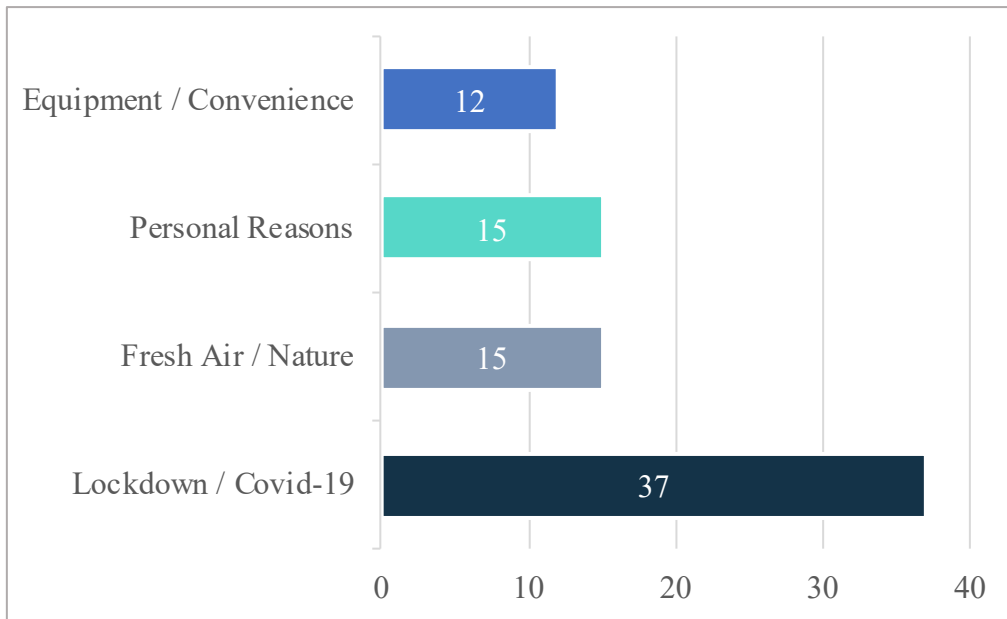
Total count: 75 responses

### Question 10: Where do you do sports?



Total count: 100 responses

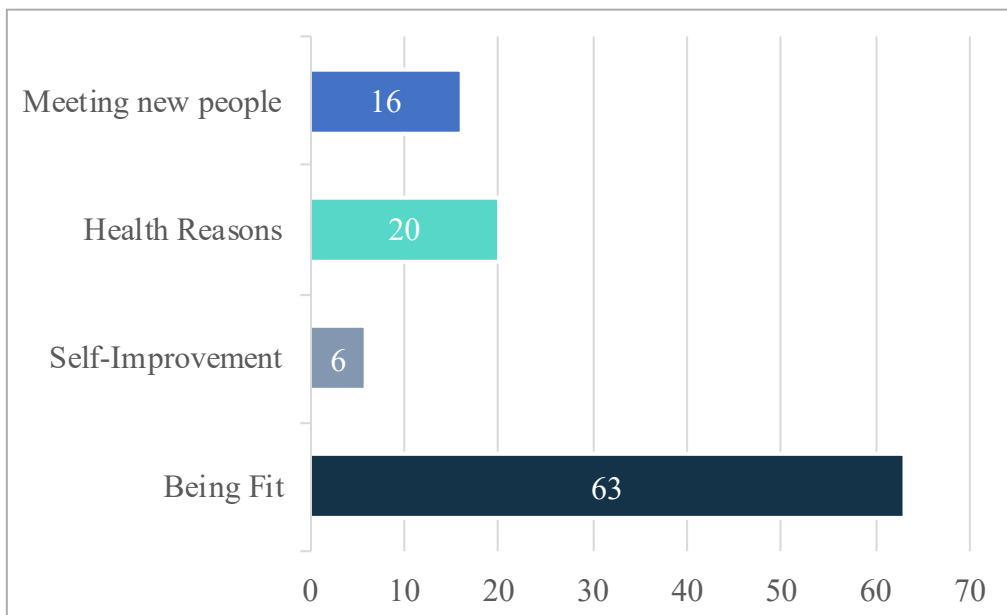
**Question 11: What are the reasons for it (lockdown, personal reasons, etc.)?**



Total count: 98 responses

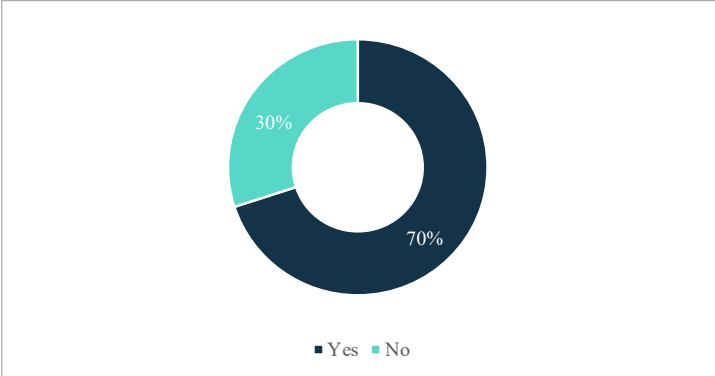
**Section 3: Sport Motivation**

**Question 12: What is your reason behind doing sports? (being fit, meeting new people, etc.)**



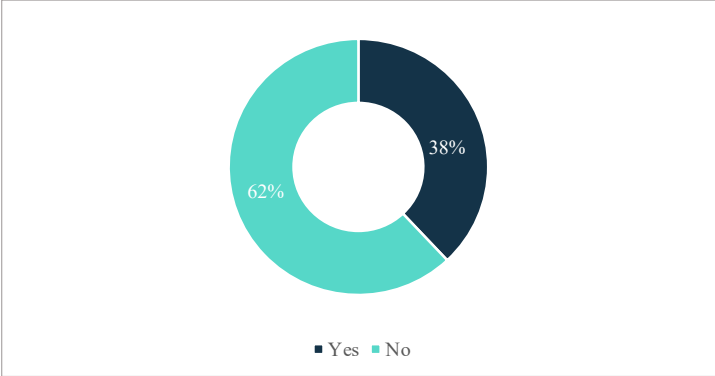
Total count: 101 responses

**Question 13: Would you do more sports if you could easily find more partners to do it with?**



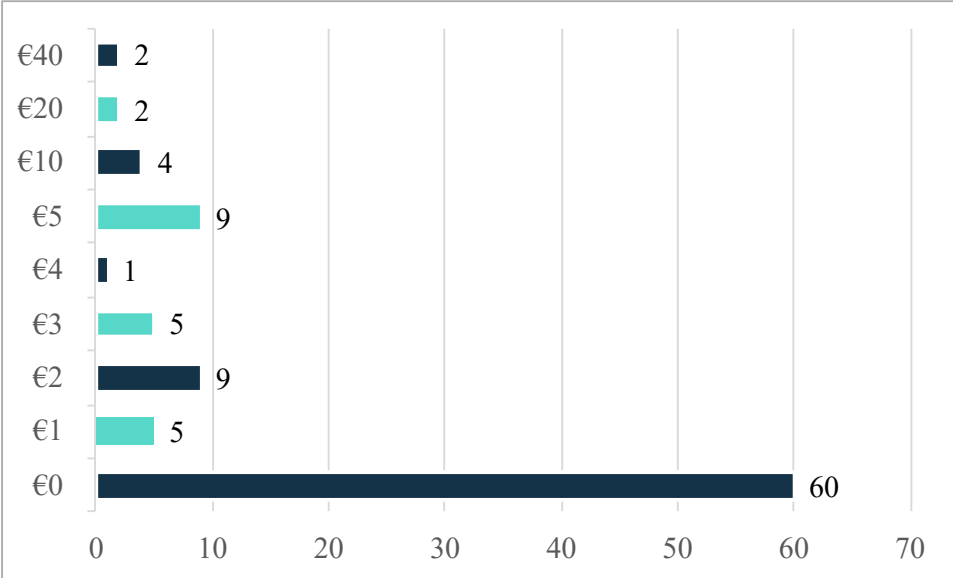
Total count: 100 responses

**Question 14: Would you be willing to pay some money to find sport mates?**



Total count: 100 responses

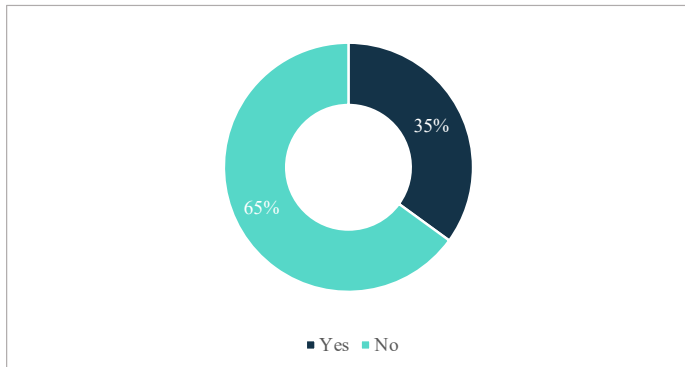
**Question 15: How much would you pay?**



Total count: 97 responses

## Section 4: University Sport Offering

### **Question 16: Are you satisfied with the sports offering at your university?**



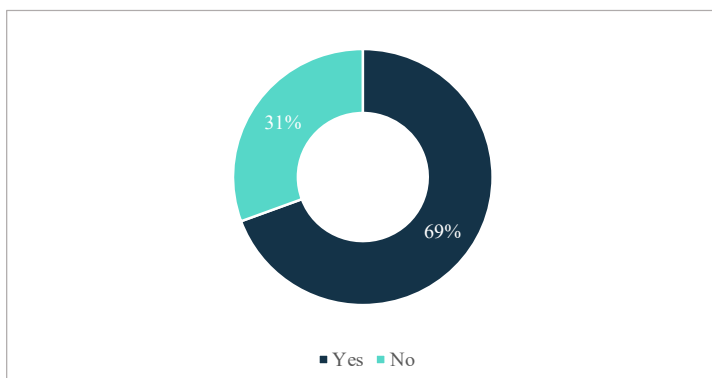
Total count: 100 responses

### **Question 17: Would you desire anything else? Would you change something?**

**Most common answers:** More variety in the offer, less crowded spaces, outdoor group classes, higher number of participants per class or more classes, aggregated overview of available activities, finding sport mates, better booking experience, challenges/competition, a mobile app, events

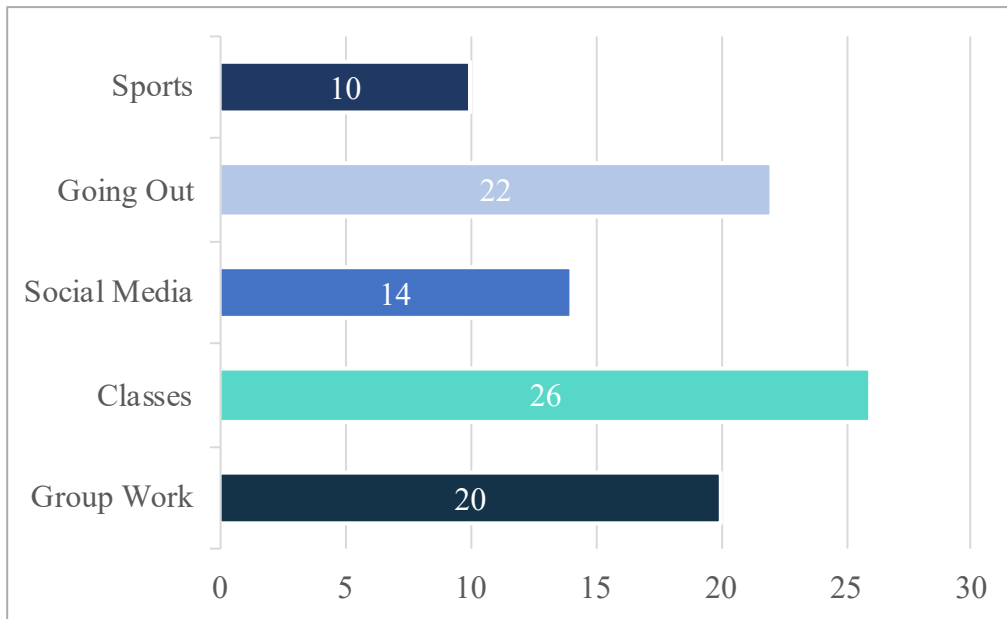
Total count: 75 responses

### **Question 18: Would you be willing to pay for sport activities at your university?**



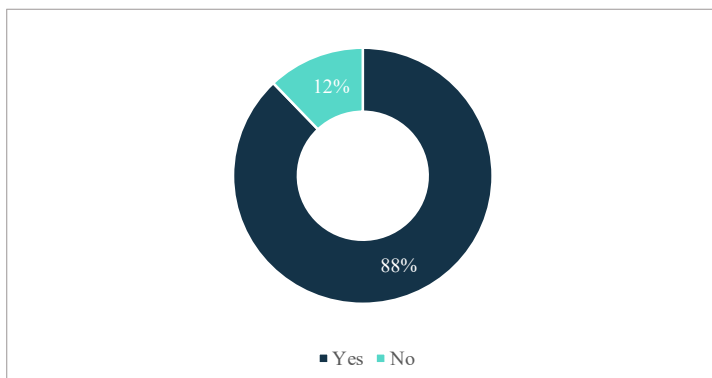
Total count: 98 responses

**Question 19: How do you connect with other students?**



Total count: 87 responses

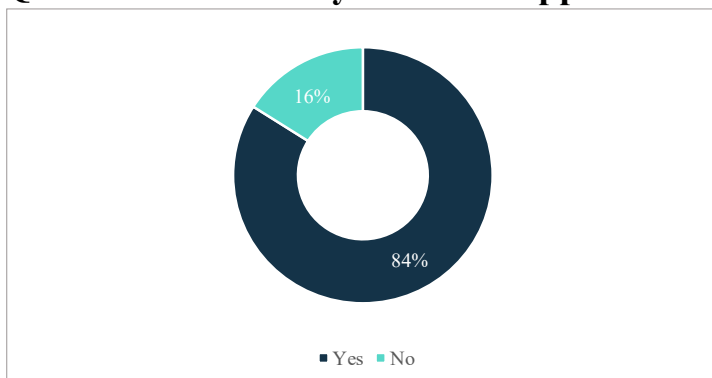
**Question 20: Would you like to meet other students through sports?**



Total count: 99 responses

**Section 5: Business Idea**

**Question 21: Would you use the app?**



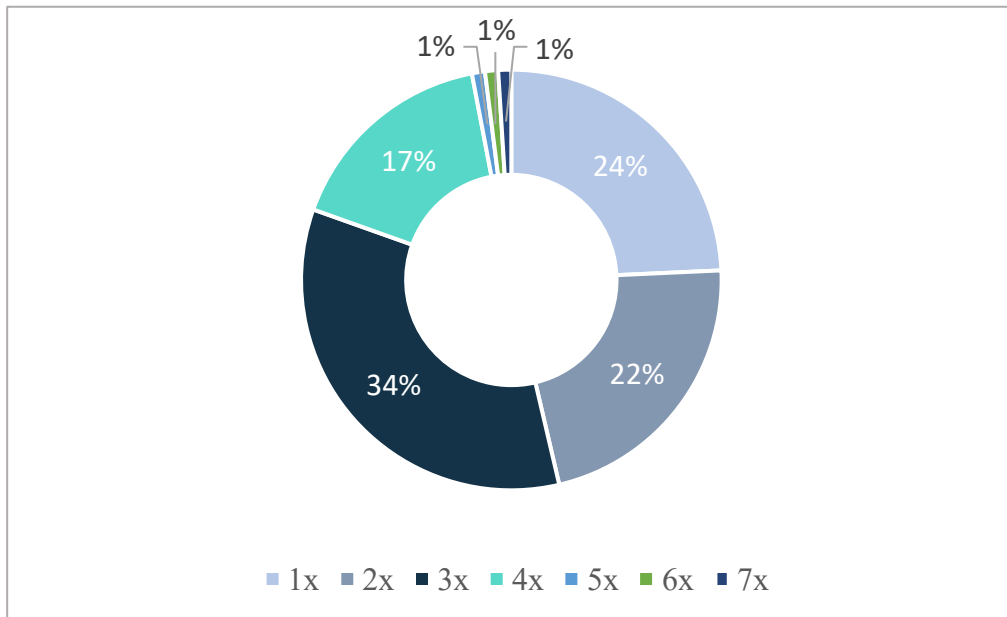
Total count: 100 responses

### Question 22: Which features would you like to see on the app?

**Most common answers:** Personal stats, competition, map with locations of venues/events, calendar schedule, booking feature, filters, chat, possibility to rent equipment, people matching, communities, polls, group challenges, gamification, weekly progress

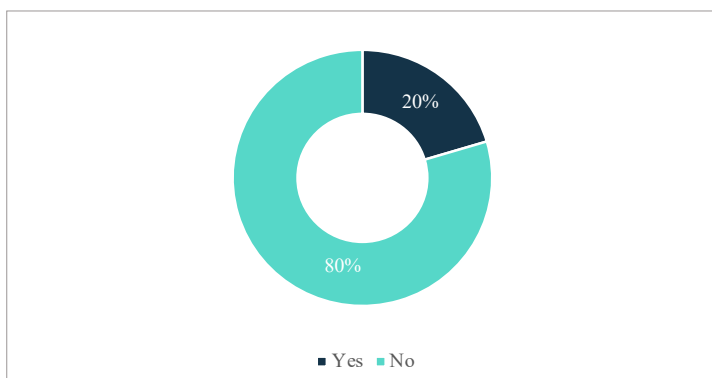
Total count: 81 responses

### Question 23: How often would you use it per week?



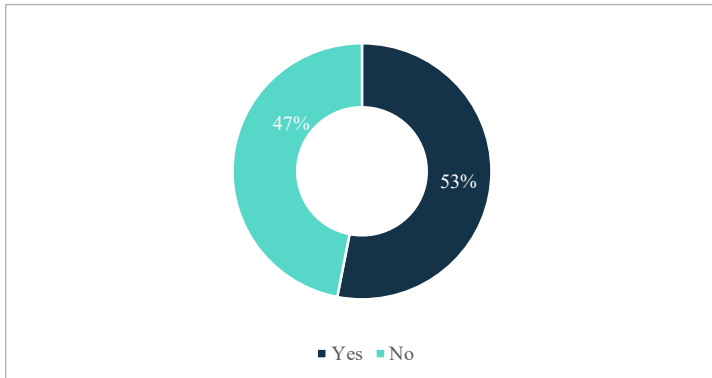
Total count: 90 responses

### Question 24: Would it replace something for you, like a gym membership?



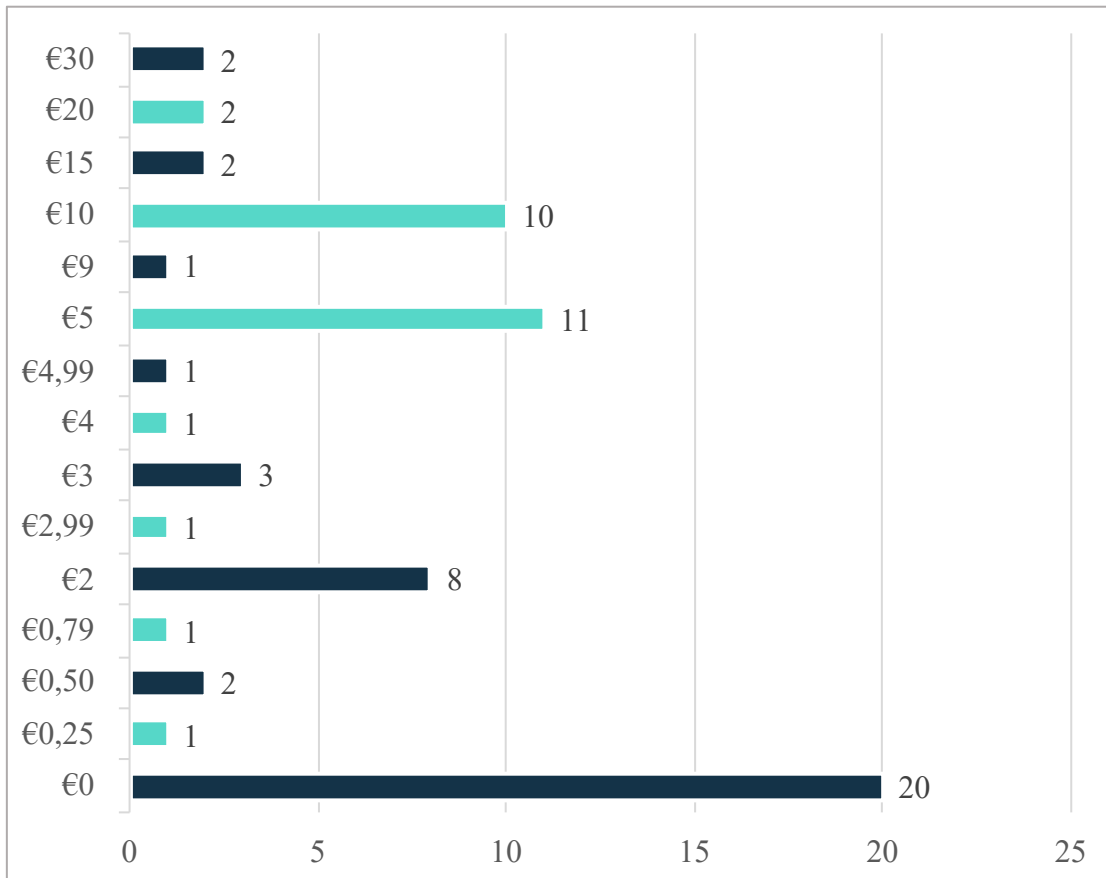
Total count: 98 responses

### Question 25: Would you be willing to pay for it?



Total count: 98 responses

### Question 26: How much would you pay for it?



Total count: 75 responses

## Appendix 2: Expert Interviews

### Interview 1 with Nova Student's Union (E1)

**Name of Participants:** José Maria Trindade

**Functionality:** Head of the Sports Office at Nova SU

<b>Current sports offering</b>	<ul style="list-style-type: none"> <li>- Nova SBE is part of the university of NOVA. The faculty has three official (competitive) sports: Football and futsal, and women's volleyball</li> <li>- Next to competitive teams, there are independent clubs run by students (running club, surf club, yoga club etc.)</li> <li>- This semester, the SU launched e-sports</li> </ul>
<b>Course instructors</b>	<ul style="list-style-type: none"> <li>- 1-2 coaches per team for professional sports teams</li> </ul>
<b>Sign-up &amp; booking process</b>	<ul style="list-style-type: none"> <li>- Try-outs at the beginning of the year. University sports are professional in Portugal</li> </ul>
<b>Used tools &amp; applications</b>	<ul style="list-style-type: none"> <li>- WhatsApp Groups</li> <li>- Facebook pages</li> <li>- Instagram accounts</li> </ul>
<b>Partnerships &amp; payments</b>	<ul style="list-style-type: none"> <li>- Partnerships with external sport facilities such as the Surf Club. Independent clubs, but Nova SU has the contact and makes sure that they are in the patterns of NOVA</li> <li>- SU is very open to collaboration and would like to have a mobile application for university sports</li> <li>- SU is willing to promote a prototype to acquire users quickly</li> <li>- Very interested in a prototype to gather user feedback</li> <li>- App needs approval by Nova and the IT team</li> </ul>

### Interview 2 with University Göttingen Student's Union (E2)

**Name of Participants:** Dr. Mischa Lumme

**Functionality:** Board Member of ADH (Allgemeiner Deutscher Hochschulsportverband)

<b>Current sports offering</b>	<ul style="list-style-type: none"> <li>- ADH is the central organization in Germany that regulates the sport offering of 180 universities</li> <li>- There is a large gap between the quality of the offering of university sports</li> <li>- Göttingen, as a traditional university, is backed by many motivated students to do sports since the majority of students live in the city</li> <li>- Göttingen has the highest number of enrolled sport members (16k) in Lower Saxony</li> <li>- Equipped very well in terms of sport venues</li> </ul>
	<ul style="list-style-type: none"> <li>- Qualified course instructors are rare</li> <li>- Often course instructors are trained and licensed by the own university</li> </ul>

<b>Course instructors</b>	<ul style="list-style-type: none"> <li>- Not all course instructors have a license</li> <li>- Payment for course instructors is aligned with market prices</li> </ul>
<b>Sign-up &amp; booking process</b>	<ul style="list-style-type: none"> <li>- Membership model for students with a monthly fee of 2.20€ to attend basic classes</li> <li>- More advanced classes with qualified course instructors may cost more to attend</li> <li>- Use of regular "shopping cart" system to register for courses</li> <li>- Current setup lacks a user-friendly interface</li> </ul>
<b>Used tools &amp; applications</b>	<ul style="list-style-type: none"> <li>- Own in-house developed, customized software for bookings</li> <li>- Have used a mobile application in the past (8years ago) but stopped using it because of maintenance</li> <li>- Most universities use <i>Buchsys</i> as a general payment and booking software provider. <i>Buchsys</i> also has a mobile version for the universities. However, the software is rather rigid for many universities</li> <li>- Göttingen tried to distribute their own software solution for all universities within the ADH ecosystem, which did not work out due to the customization. The goal is to offer it as an open-source software solution</li> <li>- The market is rather hard to entry, because universities are accustomed to pay little money for the current setup</li> <li>- In general, most universities lack digitalization when it comes to their website presence and other processes</li> </ul>
<b>Partnerships &amp; payments</b>	<ul style="list-style-type: none"> <li>- Göttingen owns most sport facilities. Other universities often have to share and rent public facilities together with local sport clubs</li> <li>- Generates most revenue from membership fees and only requires little extra money from public funding</li> </ul>

### Interview 3 with Hochschulsport Universität Stuttgart (E3)

**Name of Participants:** Anna-Lena Fahl

**Functionality:** Head of University Sports

<p><b>Current sports offering</b></p>	<ul style="list-style-type: none"> <li>- Pre-Covid: 200 courses per semester -&gt; Monday-Friday. On the weekend, students can book sport venues</li> <li>- Not just courses, but also health management, events, professional training and licensing, sport facilities, competitive sports</li> <li>- During Covid: Zoom, YouTube etc. as tools to have online classes</li> </ul>
<p><b>Course instructors</b></p>	<ul style="list-style-type: none"> <li>- Requirements (i.e. licenses) to become a trainer depend on the level of offered courses. However, some experience is always required</li> </ul>
<p><b>Sign-up &amp; booking process</b></p>	<ul style="list-style-type: none"> <li>- External booking software provider is used (80% of universities in Germany use this system). The software relates to university-specific websites.</li> </ul>
<p><b>Used tools &amp; applications</b></p>	<ul style="list-style-type: none"> <li>- Generally, very interested in offering an app for students. However, having to update the app constantly makes it hard to realize</li> <li>- Ideally, the mobile application should offer students the possibility to engage in challenges, competitions, and events</li> <li>- External app provider raises questions regarding data security</li> <li>- Emails will be sent to participants via the booking system</li> <li>- WhatsApp groups are not used due to data security concerns</li> <li>-</li> </ul>
<p><b>Partnerships &amp; payments</b></p>	<ul style="list-style-type: none"> <li>- Partnerships with sport venues (i.e. Golf, Boxing) depending on the demand of students</li> <li>- Sport venues are very limited (i.e. Swimming etc.)</li> <li>- Students pay either per course per semester, ticket system, or one payment for the whole semester</li> </ul>

### Interview 4 with University of Mannheim (E4)

**Name of Participants:** Christian Burghahn

**Functionality:** Head of University Sports

<b>Current sports offering</b>	<ul style="list-style-type: none"><li>- Sport venues such as fitness studios and courts</li><li>- Different sport activities</li><li>- Competition events</li><li>- What really stands out is the sports partner portal</li><li>- During Covid, live streams are offered via zoom or Vimeo</li></ul>
<b>Course instructors</b>	<ul style="list-style-type: none"><li>- Course trainers are mostly licensed to provide high-quality courses</li></ul>
<b>Sign-up &amp; booking process</b>	<ul style="list-style-type: none"><li>- Website based booking process for the classes</li><li>- Participants will receive an email for booking confirmation</li></ul>
<b>Used tools &amp; applications</b>	<ul style="list-style-type: none"><li>- Sports partner portal does not provide a seamless interface, looks outdated</li><li>- External booking software provider is used (buchsys)</li><li>- Active social media channels</li></ul>
<b>Partnerships &amp; payments</b>	<ul style="list-style-type: none"><li>- Sport venues as main partners</li><li>- Mannheim's institute of sport partners with other universities nearby (i.e. University of Heidelberg, DHBW Mannheim, etc.) and offers these students to participate in the sport activities</li></ul>

## Interview 5 with FU Berlin (E5)

**Name of Participants:** Christian Mundhenk

**Functionality:** Director of university sports

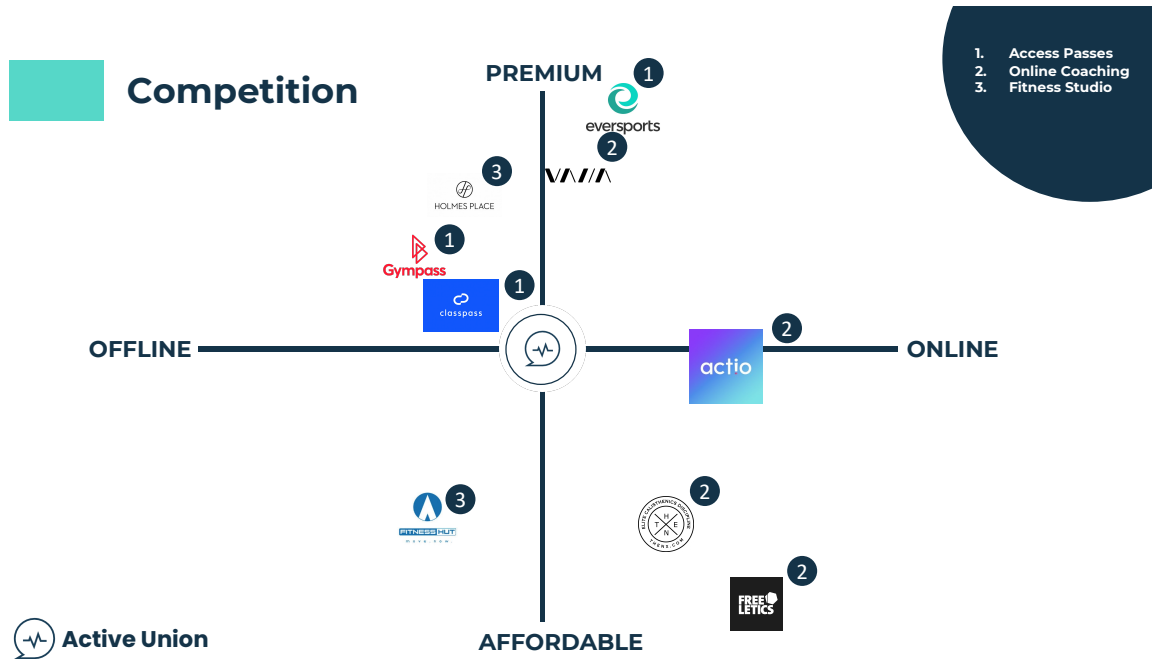
<b>Current sports offering</b>	<ul style="list-style-type: none"><li>- The central university sports facility offers a wide range of sports, workshops, sport trips</li><li>- Comprehensive and high-quality range of courses in more than 120 sports and with up to 800 individual events per semester</li><li>- Streaming for home workouts (limited to 12 people)</li><li>- Possible court bookings (i.e. Tennis)</li><li>- E-Sports offering</li><li>- "Coach the coach" initiative, where coaches have the opportunity to join colleagues in order to acquire new skills</li><li>- Included fitness studio named "Kraftclub"</li><li>- Partner Portal</li></ul>
<b>Course instructors</b>	<ul style="list-style-type: none"><li>- Licensed trainers for specific sport activities</li></ul>
<b>Sign-up &amp; booking process</b>	<ul style="list-style-type: none"><li>- Payment per course or membership fee for the semester</li><li>- Sign-up through the website. However, basic interface and user experience</li></ul>
<b>Used tools &amp; applications</b>	<ul style="list-style-type: none"><li>- External booking software provider is used (buchsys)</li></ul>
<b>Partnerships &amp; payments</b>	<ul style="list-style-type: none"><li>- Partnerships with sport venues (i.e. Water sports centre)</li><li>- Partnerships with sponsors: Insurance companies (i.e. Techniker Krankenkasse), banks (BBBank), associations (ADH etc.)</li></ul>

## Appendix 3: Competitor Overview

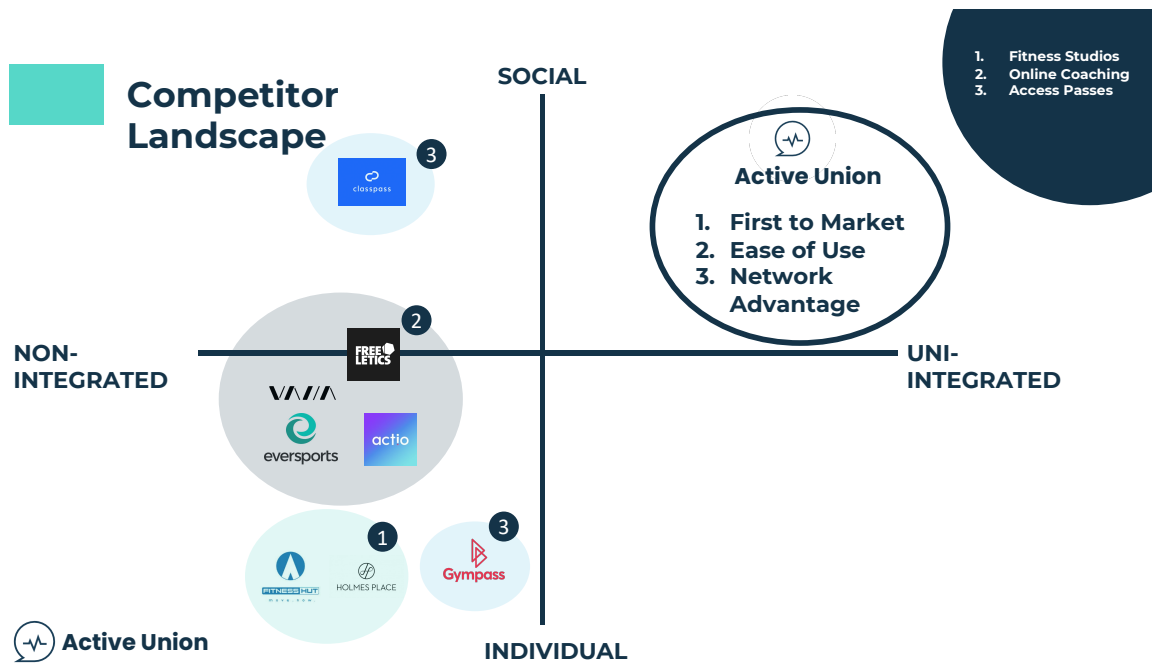
Apps	Classpass	Gympass	Eversports	Actio	Freeletics	Thenx	Vaha	Fitness Hut	Holmes Place
<b>Cluster</b>	Access Passes	Access Passes	Access Passes	Online Coaching	Online Coaching	Online Coaching	Online Coaching	Fitness Studio	Fitness Studio
<b>Features</b>	<ul style="list-style-type: none"> <li>- In-studio classes</li> <li>- Salon &amp; spa appointments</li> <li>- Digital Classes</li> </ul>	<ul style="list-style-type: none"> <li>- Various studio memberships</li> <li>- Live classes from your favorite trainers and partner facilities</li> <li>- Your corporate wellness program for a healthy body and mind</li> </ul>	<ul style="list-style-type: none"> <li>- Book your favorite Sport, Fitness and Yoga activities online</li> <li>- Book courts online</li> </ul>	<ul style="list-style-type: none"> <li>- Choose from 100+ daily classes and train under the guidance of the best coaches</li> <li>- Replaces app notifications with calls to motivate you in ways you've never been before.</li> </ul>	<ul style="list-style-type: none"> <li>- Online video trainings</li> <li>- Customized training plans with AI</li> <li>- Nutrition Plans</li> </ul>	<ul style="list-style-type: none"> <li>- Custom Programs</li> <li>- Technique guides</li> </ul>	<ul style="list-style-type: none"> <li>- Personal Training</li> <li>- Live classes</li> <li>- 200 on-demand workouts</li> </ul>	<ul style="list-style-type: none"> <li>- Personal Training</li> <li>- Classes in the gym</li> <li>- gym with basic equipment</li> </ul>	<ul style="list-style-type: none"> <li>- Personal Training</li> <li>- Classes in the gym</li> <li>- gym with basic equipment</li> <li>- wellness and spa</li> </ul>
<b>Problem Solved</b>	Access every class, studio and spa without any restrictions of contracts or commitments	A platform that gives you a diverse network of digital fitness and wellness apps	Access different classes in various sport activities	Live interaction with coaches at any time through phone calls for an affordable price	Digital coaching, available anytime, no equipment needed	Digital coaching, available anytime, no equipment needed	Large scale mirror with guided assistance to enable correct execution of exercises	low cost gym with basic equipment	premium gym, wellness & spa
<b>Differentiator</b>	A two sided marketplace that attracts both studio users and end-users to its platform	A platform that empowers companies to engage their workforce in physical activity by providing access to the largest global network of workout facilities	A platform that empowers users to find local venues	Video calls enable a personalized session in real time	Distinctive approach to training through freeletics, big community	access to fitness celebrity training programs	interactive fitness mirror for home workouts	low cost gym for everybody	premium offering
<b>Weakness</b>	High churn rate when people find ideal class	Only accessible when the company has a partnership	Limited to people that want to access different classes	Limited offering: Fitness, Yoga and Meditation	Limited to AI coaching, no personal trainer experience	Limited to available online videos, no personal experience with coaches	Limited to available online offering	Limitation of equipment, crowdy space	premium price
<b>User Satisfaction</b>	<ul style="list-style-type: none"> <li>- App Store: 4.9 out of 5 - 100.7k Ratings</li> <li>- Google Play: 3.6 out of 5 - 6.8k Ratings</li> </ul>	<ul style="list-style-type: none"> <li>- App Store: 4.4 out of 5 - 1.9k Ratings</li> <li>- Google Play: 3.7 out of 5 - 42.5k Ratings</li> </ul>	<ul style="list-style-type: none"> <li>- App Store: 4.7 out of 5 - 611 Ratings</li> <li>- Google Play: 4.0 out of 5 - 39k Ratings</li> </ul>	<ul style="list-style-type: none"> <li>- App Store: 4.8 out of 5 - 32 Ratings</li> <li>- Google Play: 4.7 out of 5 - 13 Ratings</li> </ul>	<ul style="list-style-type: none"> <li>- App Store: 4.6 out of 5 - 18.2K Ratings</li> <li>- Google Play: 4.2 out of 5 - 205K Ratings</li> </ul>	<ul style="list-style-type: none"> <li>- App Store: 4.8 out of 5 - 8.4K Ratings</li> <li>- Google Play: 4.3 out of 5 - 14.3K Ratings</li> </ul>	<ul style="list-style-type: none"> <li>- App Store: 4.3 out of 5 - 18 Ratings</li> <li>- Google Play: 3.5 out of 5 - 13 Ratings</li> </ul>	<ul style="list-style-type: none"> <li>- App Store: 2.7 out of 5 - 391 Ratings</li> <li>- Google Play: 3.5 out of 5 - 2.6k Ratings</li> </ul>	<ul style="list-style-type: none"> <li>- App Store: 3.4 out of 5 - 72 Ratings</li> <li>- Google Play: 2.8 out of 5 - 60 Ratings</li> </ul>
<b>Price</b>	<ul style="list-style-type: none"> <li>- 12€ per month: 1-2 classes</li> <li>- 24€ per month: 2-5 classes</li> <li>- 49€ per month: 5-12 classes</li> </ul>	<ul style="list-style-type: none"> <li>- 9.99€ per month: partners, 28 apps</li> <li>- 14.99€ per month: 700 partners, 47 apps</li> <li>- 29.99€ per month: 1.4k partners, 50 apps</li> <li>- 49.99€ per month: 2.0k partners, 52 apps</li> <li>- 79.99€ per month: 2.5k partners, 52 apps</li> </ul>	<ul style="list-style-type: none"> <li>- 65€ per month: 0-199 bookings</li> <li>- 98€ per month: 200-599 bookings</li> <li>- 142€ per month: 600-1499 bookings</li> <li>- 197€ per month: 1500+ bookings</li> </ul>	<ul style="list-style-type: none"> <li>- 2.40€-4.00€ per session</li> <li>- €12€ package: 3 courses</li> <li>- 50€ package: 21 courses</li> </ul>	<ul style="list-style-type: none"> <li>- 6.92€ per month: Training</li> <li>- 10.4€ per month: Training, Coaching, Nutrition</li> </ul>	<ul style="list-style-type: none"> <li>- 9.99\$ per month: All Access</li> <li>- 89.99\$ per year: All Access</li> </ul>	<ul style="list-style-type: none"> <li>- 2268€ initial fee for mirror</li> <li>- 39€ per month: Membership</li> </ul>	<ul style="list-style-type: none"> <li>- 19.99€ per month</li> </ul>	<ul style="list-style-type: none"> <li>- 69.9€ / month for Lifestyle subscription</li> <li>- 79.9€ / month for Classic subscription</li> </ul>
<b>Price Segment</b>	Medium	Medium	High	Medium	Low	Low	High	Low	High
<b>Online classes / Offline classes</b>	Both	Both	Both	online classes	online classes	online classes	online classes	primarily local, but also online classes	primarily local, but also online classes
<b>Funding Round</b>	Series E: \$549.1 million	Series D: \$300 million	Series A: \$10.5 million	Seed: €10 million	Series B: \$70 million	not applicable	Seed Round	not applicable	Series Unknown
<b>Investors</b>	43 Investors: Temasek Holdings, Apax Digital, L Catterton, GV, General Catalyst etc.	12 investors: SoftBank Vision Fund, General Atlantic, Atomico, Valor Capital Group, Kaszek etc.	17 investors: ENERN Investments, Point Nine, Market One Capital, RTAventures VCGerbig Ventures etc.	11 investors: Heal Capital, HV Capital, Cavalry Ventures etc.	10 investors: Causeway Media Partners, Jazz Venture Partners, FITLAB, Cava Capital etc.	not applicable	5 Investors: HV Capital, Global Founders Capital, Unbound, Porsche Ventures, RTP Global	acquired by VivaGym	3 Investors: Armada Credit Partners, Alantra, Explorer Investments
<b>Year Founded</b>	2013	2012	2013	2019	2013	2013	2012	2011	1979

## Appendix 4: Cluster Analysis

### Appendix 4.1: Cluster Analysis with a Focus on Price and State Dimension



### Appendix 4.2: Cluster Analysis with a Focus on Social Scale and Service Integration



## *Appendix 4.3: SWOT Analysis*

### **Strengths**

Active Union's strengths can equally be considered as a competitive advantage. To begin with, Active Union will be the first to market and can therefore quickly target different universities. Second, the application will offer users a seamless usability experience with key features, which will be essential to have as a front-end solution. Based on the fact that the founder team has a diverse background from studying at several universities, great network effects can be leveraged to achieve immediate product recognition. On top of this, the first successful interviews with potential customers can serve as a foundation for fruitful cooperation and partnership.

### **Weaknesses**

For each market, there are different systems that are already integrated into the university ecosystem (i.e. Buchsys in the German university landscape). Therefore, Active Union is dependent on the integration of such back-end solutions. This dependency is also reflected in partnerships with sports venues (i.e. booking of equipment and pitches) and other partnerships.

### **Opportunities**

As Active Union already raised interest and convinced two critical stakeholders from the ADH about the project, these contacts could turn out to be big steppingstones to drive the future success and implementation of the project given the high number of members of the ADH.

Apart from that, the biggest opportunity is the goal to become a white-label solution for different universities throughout Europe. In case of a wide adaptation of the service across Europe, Active Union could expand to other continents. Building upon the expansion to various markets, once Active Union has acquired sufficient active users, there is the opportunity to

introduce advertising for partners such as sport and nutrition brands which would ultimately diversify the revenue streams. In the long-term, the business model could also be implemented at schools or sport clubs to allow a wider integration to different markets.

## Threats

Universities could potentially hesitate to integrate Active Union’s solution as it might require changing the whole IT system for sport bookings. In addition, universities could have a low willingness to pay due to budget constraints. In the end, the success of Active Union highly depends on the user feedback of students and how they enjoy the service.

## Appendix 5: Customer Personas

### Appendix 5.1: John Mayer

**ABOUT**

AGE: 24

LOCATION: Lisbon

EDUCATION: Msc in Management at Nova SBE

## John Mayer

**BIO**  
John is a self-taught fitness expert since 2013. As soon as he started running, he turned it into a habit, and he firmly believes in leading a holistic & balanced life. According to him, nutrition and mental fitness among physical training is the best way to keep oneself fit.

**Frustrations**  
-has limited options to find new sports buddies  
  
-as a tech lover, he is disappointed that there is no great mobile application to connect with students for sports activities

**Goals**  
-wants to stay fit and active  
  
-would like to meet new partners for running and the gym

**Activities**

- Running
- Football
- Basketball
- Fitness

**Technology**

**Favorite Lifestyle Brand**

To begin with, the first use case will highlight the highly active person that is doing sports almost every day of the week. Illustrated by John Mayer, this user is a big sport fanatic and performs both individual activities such as running and fitness, as well as playing team sports

like football or basketball. As a self-taught fitness expert, John believes in leading a holistic & balanced life; he is convinced that nutrition and mental fitness among physical exercise is the best way to keep himself fit. During the studies, John became frustrated that he usually can only meet new people through university group projects. While being a big proponent of new technologies, John spends most of his time on platforms like Facebook, Instagram, and LinkedIn. He wishes that there would be an easy way to connect and stay in touch with students, ideally through sports, but he realized that there is no option to do so.

*Appendix 5.2: Kim Lee*



## Kim Lee



**BIO**  
 Kim started practicing Yoga and mindful meditation at the young age of 14. While spending most of her earlier years in Asia, she found her passion in yoga and now makes it her life's mission to teach others in her free time.

**Activities**  
 -Running  
 -Yoga  
 -Meditation

“Yoga is the best way to find balance in life.”

**Frustrations**  
 -Kim lacks a suitable medium to organize her yoga classes

**Technology**  




**ABOUT**

<b>AGE</b>	26
<b>LOCATION</b>	Lisbon
<b>EDUCATION</b>	Msc in sustainable Entrepreneurship at Nova SBE

**Goals**  
 -would like to show initiative and start giving classes at her university  
 -convince others to engage in a healthy, plant-based lifestyle  
 -wants to stay fit, both physically and mentally

**Favorite Lifestyle Brands**  



The second use case will illustrate an individual between 20-25 years old who is talented in one specific sports activity and would like to help others improve. Such characteristics are reflected in the persona of 26 years old Kim Lee. While pursuing the Master of Science in sustainable Entrepreneurship at Nova, she would describe Yoga as the best way to find balance. With Yoga being her go-to sports activity since she was 14, Kim sees herself in the position to teach others in her free time. Unfortunately, she lacks a suitable medium to organize Yoga classes. Her

ultimate goal would be to give classes at the university, convince others to live healthier and at the same time stay fit, both physically and mentally. Besides Yoga, she would also like to engage in running activities and meditation. When it comes to her interests, she uses Instagram, LinkedIn, and HappyCow. Especially, HappyCow helps her to stay engaged in the vegan-based community, sharing reviews and recipes. Following her vegan and healthy lifestyle, she loves brands such as Honest Greens and Alo Yoga.

*Appendix 5.3: Sara May*



“ I love to try different kind of exciting sports.”

**ABOUT**

<b>AGE</b>	23
<b>LOCATION</b>	Lisbon
<b>EDUCATION</b>	Erasmus + Program, MSc in Management

## Sara May

**BIO**

Sara is a sports lover since earlier in her childhood. She was successful in Fitness, Tennis, and Dancing. This diversity reflects her love for different sports. While being an Erasmus student, she loves to travel and meeting new people.

**Frustrations**

-Sara lacks a medium that offers different kind of sports to meet new university students

**Goals**

-would like to try different kind of sports and meet others to learn a new language

-be flexible in terms of contracting

-wants to stay fit and healthy while being in another country

**Activities**

- Fitness
- Tennis
- Dancing
- Yoga

**Technology**





**Favorite Lifestyle Brands**

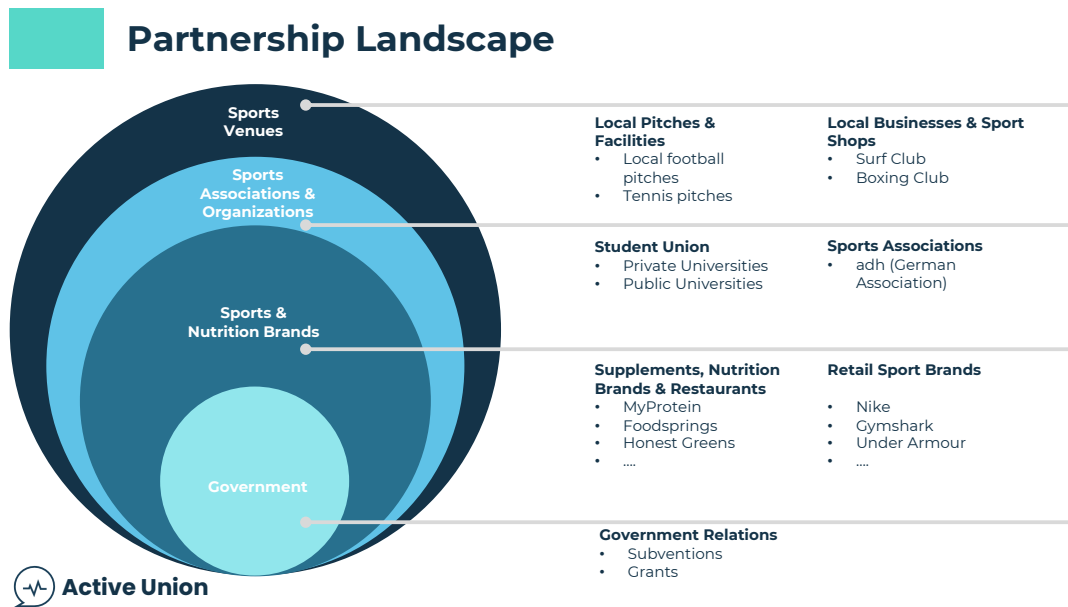

lululemon




The third use case and user segment can be described as 18-23 old outgoing individuals who travel often and are open to meeting different people. In order to illustrate the characteristics of this segment, a persona was created: 23 years old Sara May (see Appendix 5.3.) is an Erasmus exchange student at Nova SBE that loves a different kind of exciting sports, namely Fitness, Tennis, Dancing and Yoga. Her love for different sports from a very early age onwards reflects the diversity in her lifestyle. In addition, she likes to travel and meet new people. However, as the main frustration, Sara lacks a medium that offers a different kind of sports to meet new university students. In terms of goals, she would love to try different sports, be flexible in terms

of contracting and ultimately wants to stay fit while being in another country. When it comes to her interests, she primarily uses Facebook, Instagram and Pinterest. To complement her workouts, Sara prefers lifestyle brands such as Lululemon and Gymshark.

### Appendix 6: Partnerships

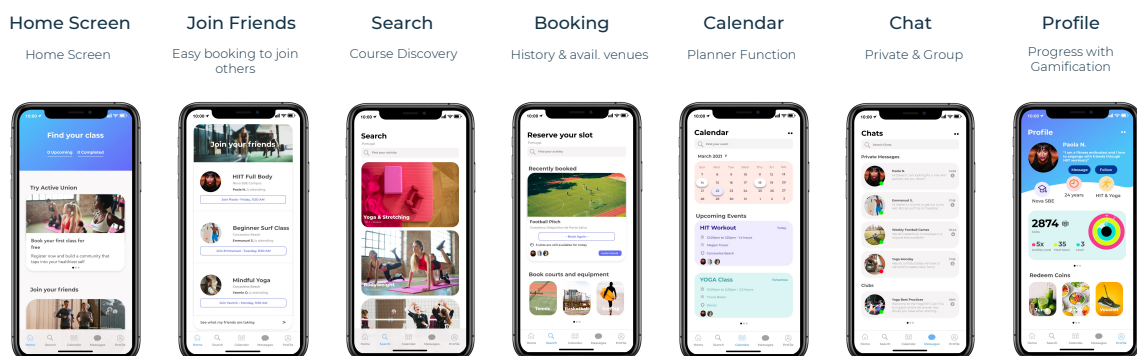


### Appendix 7: Overview App Design

#### Appendix 7.1: Mobile App Journey

#### Active Union App

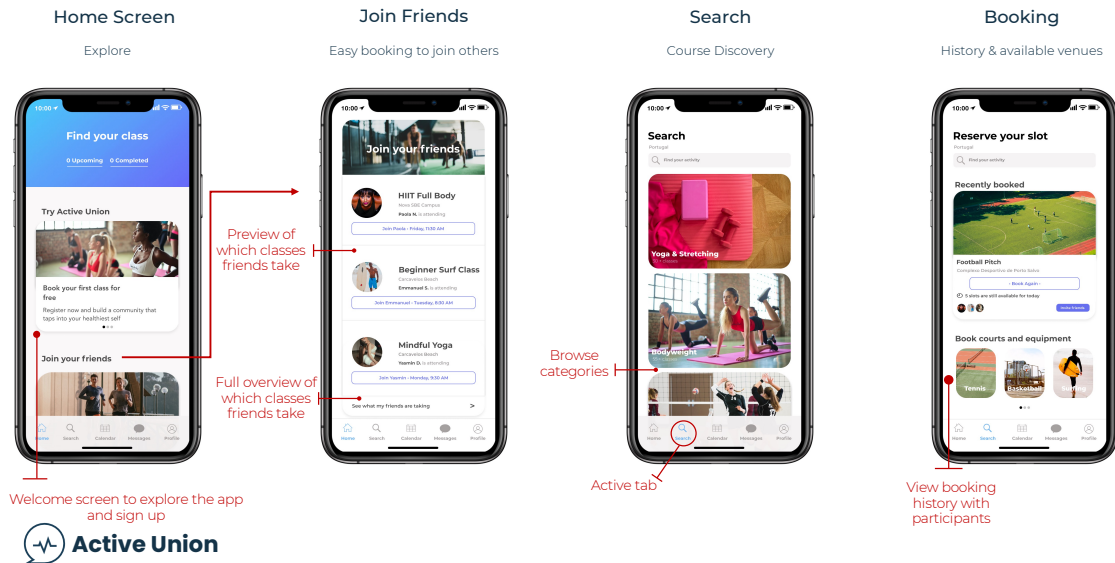
#### Journey Wireflow – Digital Wireframes



# Appendix 7.2: App Interface Students

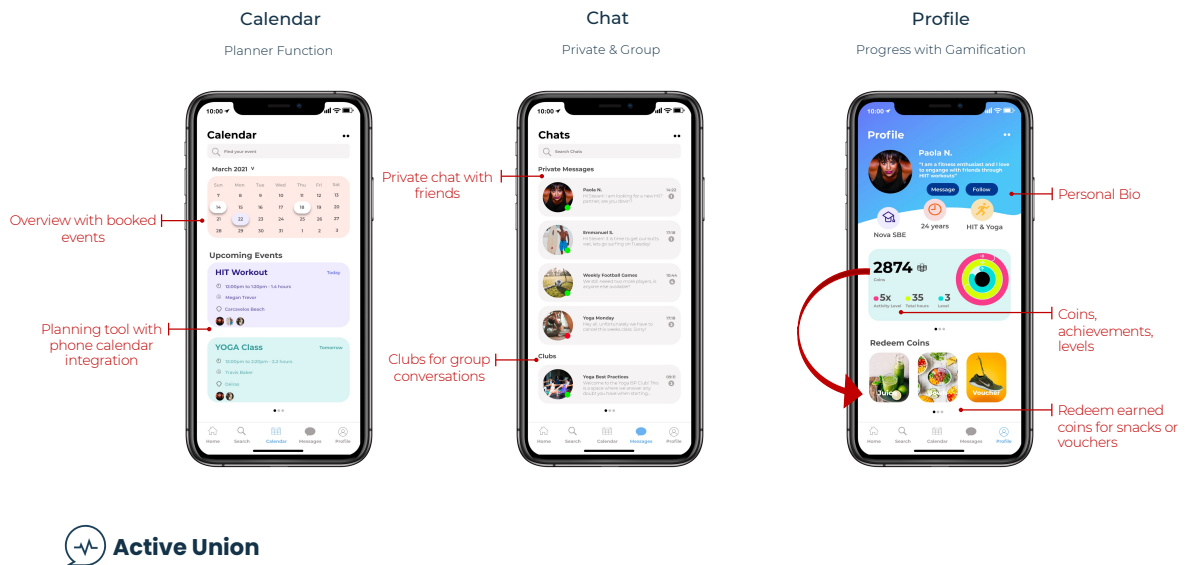
## Active Union App

## Journey Wireflow – Digital Wireframes



## Active Union App

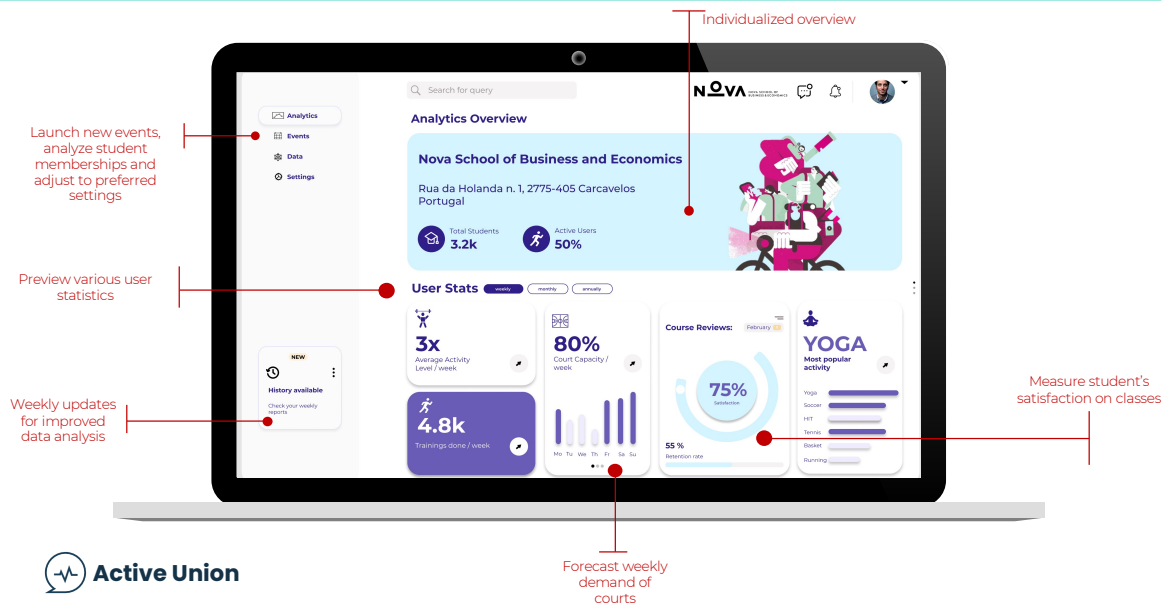
## Journey Wireflow – Digital Wireframes



## Appendix 7.3: App Interface Universities

### Active Union App

### Journey Wireflow – Digital Wireframes



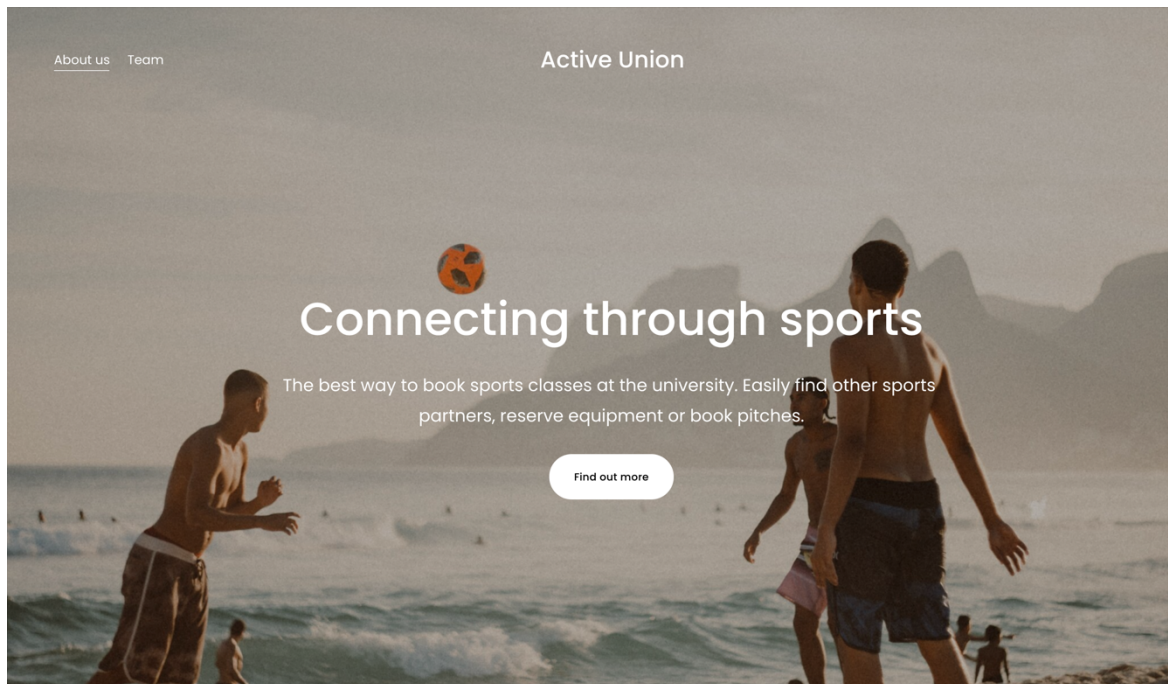
### Active Union App

### Journey Wireflow – Digital Wireframes



## Appendix 8: Landing Page

### Appendix 8.1: Home screen



### Appendix 8.2: Benefits for students

#### For students

##### INSTANT & SEAMLESS COMMUNICATION

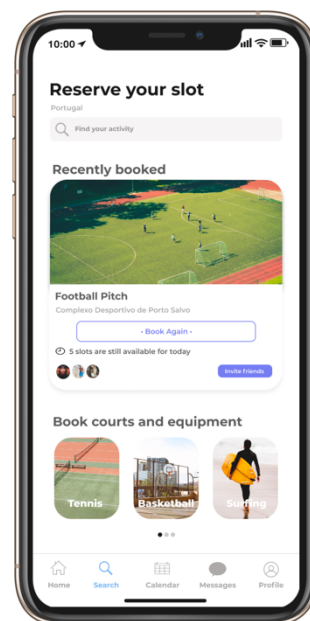
Easily contact fellow students and connect with group members from your team

##### RESERVE YOUR SLOTS

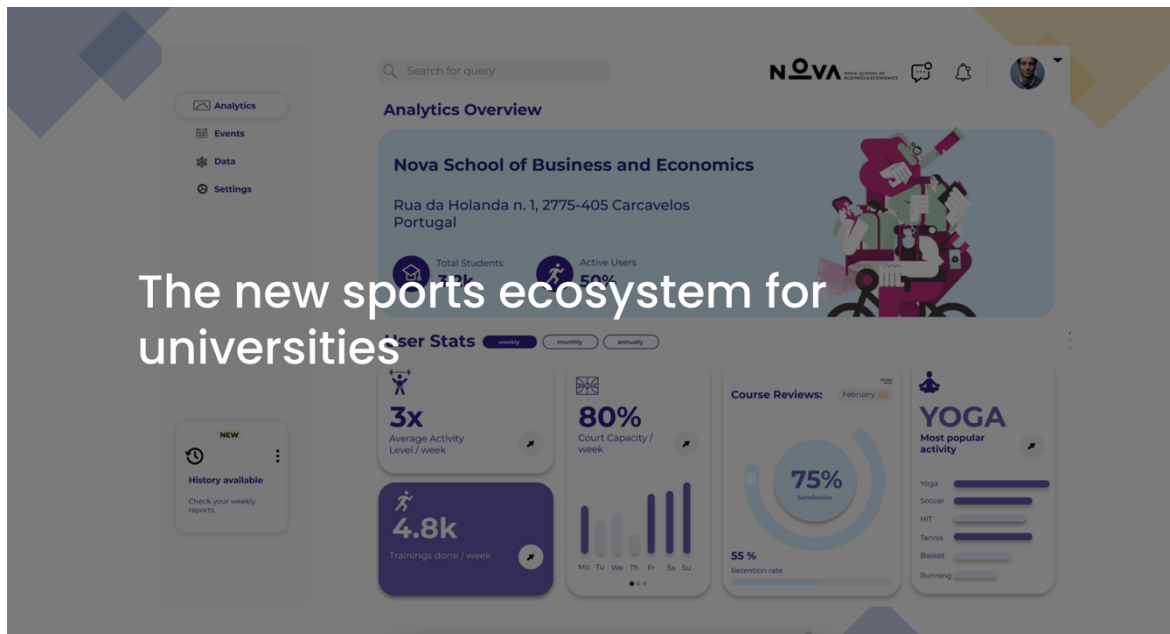
Book football pitches, tennis courts, or reserve equipment like surfboards

##### FIND SPORT ADVOCATES & EXPERTS

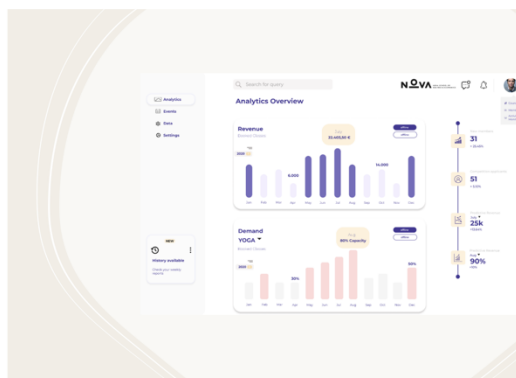
Get coaching sessions from fellow students of the intranet



## Appendix 8.3: Preview dashboard universities



## Appendix 8.4: Benefits for universities



### Functionalities

#### ALL IN ONE - ECOSYSTEM

Coordinate and administrate all sports activities on one platform

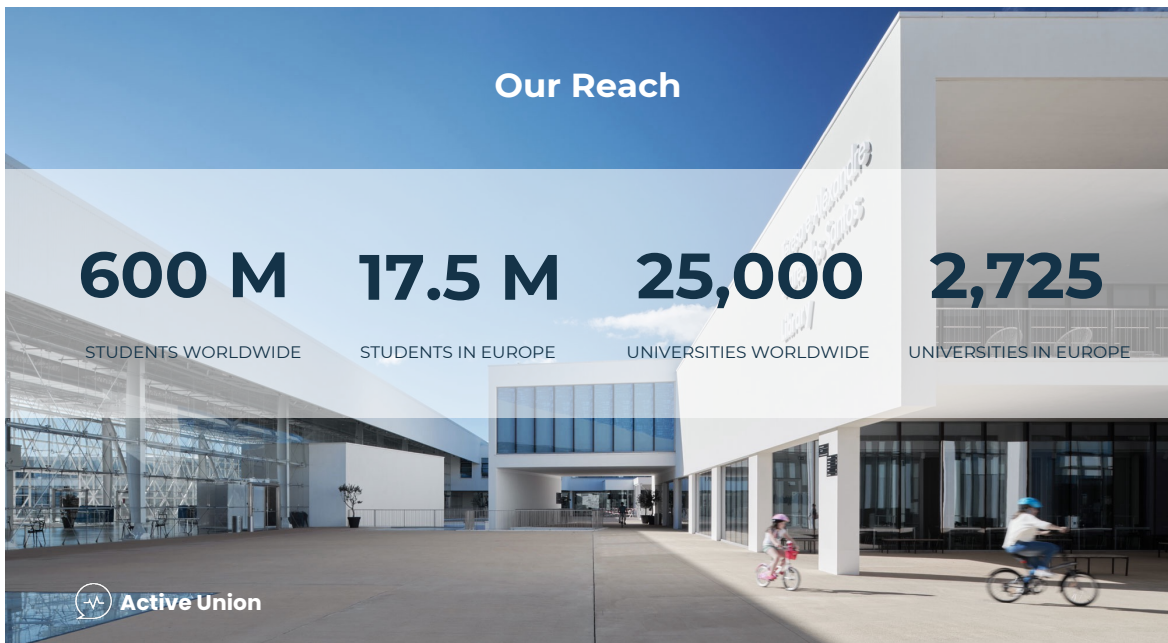
#### COMPETITION & EVENT PLANNER

Manage competition teams and plan upcoming events

#### FORECASTING BUDGET

Collect data and improve forecasting for future demand through smart analytics

*Appendix 8.5: Potential reach (customers & users)*



*Appendix 8.6: Sign up button for demo*

**Schedule a demo**

First Name

Last Name

Email Address

[book now](#)

Contact  
[Active-Union@Gmail.com](mailto:Active-Union@Gmail.com)  
(555) 555-5555

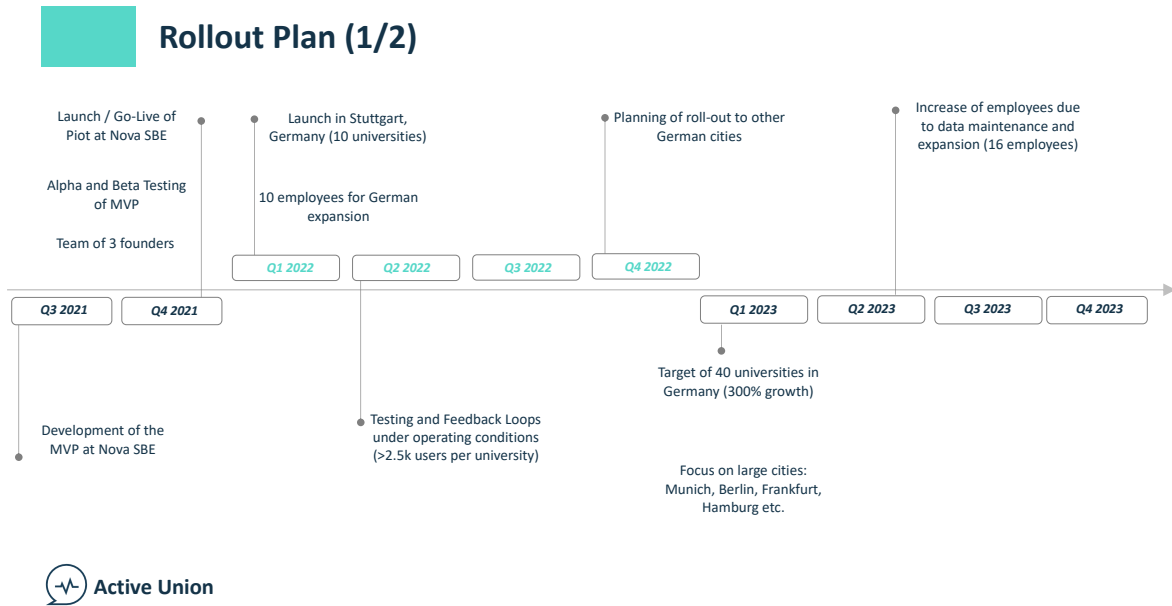
Email Address

[Sign Up](#)

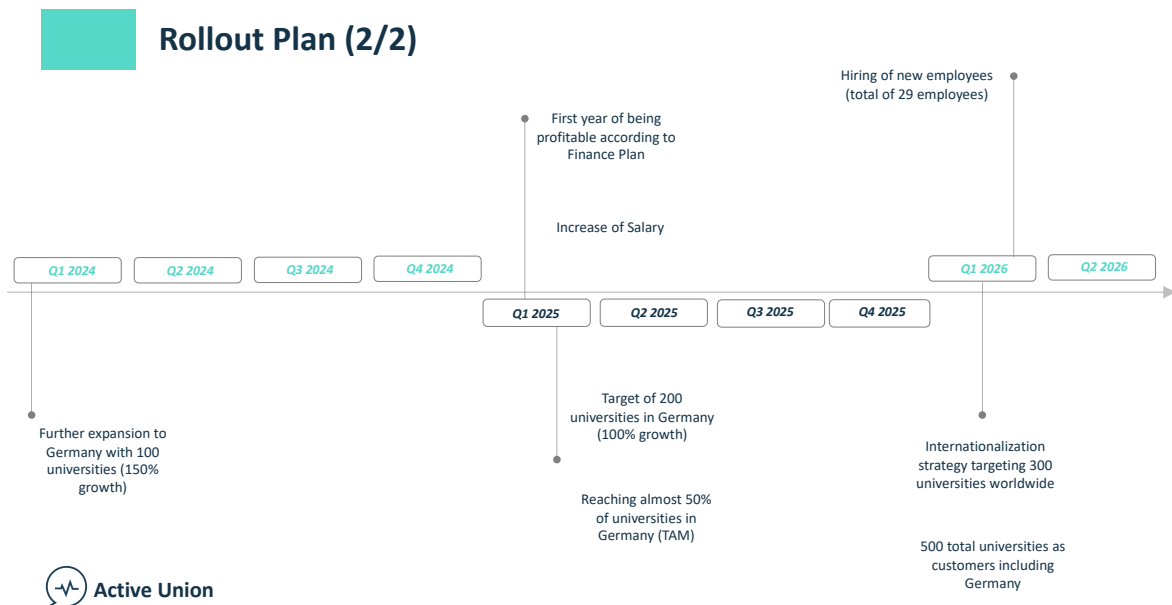
Follow us  
[Facebook](#)  
[Instagram](#)

## Appendix 9: Roll-out Plan

### Appendix 9.1: Roll-out Plan (2021-2023)



### Appendix 9.2: Roll-out Plan (2024-2026)



## *Appendix 10: Financials*

### *Appendix 10.1: Characteristics of B2B Customer Personas*

<b>High number of active users</b>	<ul style="list-style-type: none"><li>- High share of customer portfolio (most targeted customer group, high willingness to pay)</li><li>- &gt;2.5k users</li><li>- low churn rate (great community and network effect)</li><li>- CAC derived by marketing expenses</li></ul>
<b>Medium number of active users</b>	<ul style="list-style-type: none"><li>- High share of customer portfolio (large amount of medium universities in Germany)</li><li>- &gt;1k active users</li><li>- relatively low churn rate (great network effect and benefits for university)</li><li>- CAC defined by marketing expenses</li></ul>
<b>Low number of active users</b>	<ul style="list-style-type: none"><li>- Low share of customer portfolio (low amount of small universities in Germany, with less willingness to pay)</li><li>- &gt;500 active users</li><li>- Very high churn rate (less students, smaller network effects)</li><li>- CAC defined by marketing expenses</li></ul>

## Appendix 10.2: Key Metrics of Customer Personas and Calculation of Customer Lifetime Value

Key metrics of the above personas					
Active Union	Portfolio representation	Average Order Value (AOV)	Average Purchase Frequency (APF)	Churn rate	CAC
High number of active users	60%	1.250,00 €	12	10%	800,00 €
Medium number of active users	30%	1.000,00 €	12	15%	500,00 €
Low number of active users	20%	250,00 €	8	30%	250,00 €
10.000,00 €					

Margin	46%
--------	-----

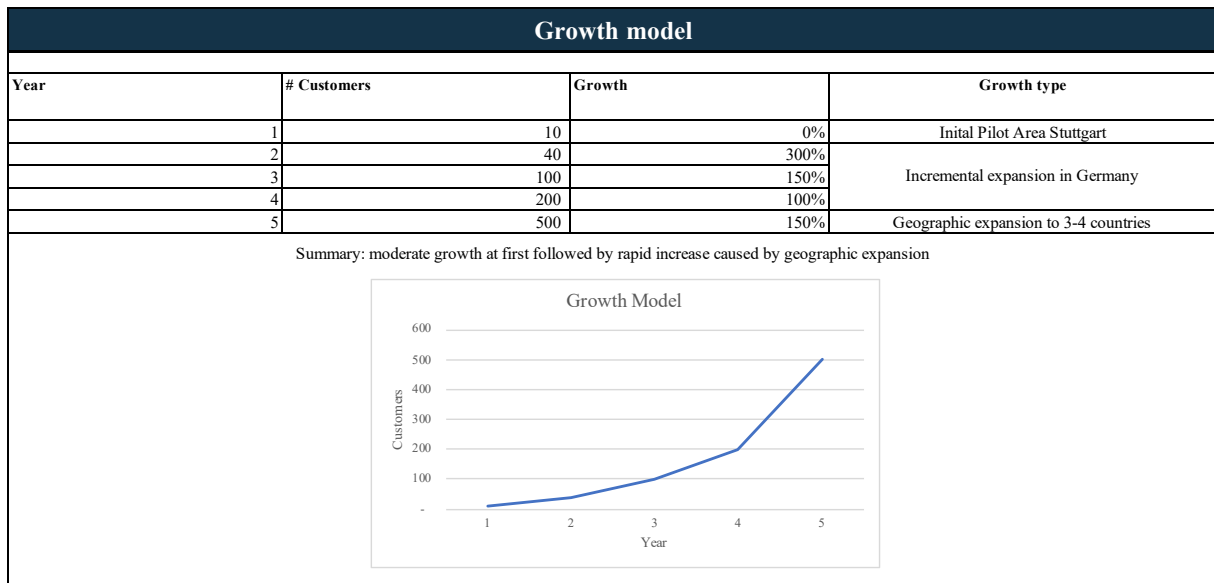
	If we take Y1 marketing expense
Overall CAC	520,00 €
High number of active users	800,00 €
Medium number of active users	500,00 €
Low number of active users	250,00 €

Calculating CLV (using initial 10 total customers as assumption)												
Active Union	# of customers	Margin/yr/customer	Year 1	Year 2	Year 3	Year 4	Year 5	5yr CLV	CAC Multiple	Blended CLV	Blended CAC	CLV/CAC ratio
High number of active users	6	6.951,28 €	41.707,70 €	37.536,93 €	33.783,23 €	30.404,91 €	27.364,42 €	28.466,20 €	35,58			
Medium number of active users	3	5.561,03 €	16.683,08 €	14.180,62 €	12.053,52 €	10.245,50 €	8.708,67 €	20.623,80 €	41,25	23.780,90 €	680,00 €	35,0
Low number of active users	2	926,84 €	1.853,68 €	1.297,57 €	908,30 €	635,81 €	445,07 €	2.570,21 €	10,28			

### Appendix 10.3: Revenue Projection

Revenue projection (built on estimated customer growth, APF, AOV and Churn)									
<b>Active Union</b>	# of new customer	Total # customers end of period	# of customers	Revenue/yr/customer	Year 1	Year 2	Year 3	Year 4	Year 5
High number of active users	10	10	6	15.000,00 €	90.000,00 €	81.000,00 €	72.900,00 €	65.610,00 €	59.049,00 €
Medium number of active users			3	12.000,00 €	36.000,00 €	30.600,00 €	26.010,00 €	22.108,50 €	18.792,23 €
Low number of active users			2	2.000,00 €	4.000,00 €	2.800,00 €	1.960,00 €	1.372,00 €	960,40 €
<b>Active Union</b>	# of new customer	Total # customers end of period	# of customers	Revenue/yr/customer	Year 1	Year 2	Year 3	Year 4	Year 5
High number of active users	30	40	24	15.000,00 €		360.000,00 €	324.000,00 €	291.600,00 €	262.440,00 €
Medium number of active users			12	12.000,00 €		144.000,00 €	122.400,00 €	104.040,00 €	88.434,00 €
Low number of active users			8	2.000,00 €		16.000,00 €	11.200,00 €	7.840,00 €	5.488,00 €
<b>Active Union</b>	# of new customer	Total # customers end of period	# of customers	Revenue/yr/customer	Year 1	Year 2	Year 3	Year 4	Year 5
High number of active users	60	100	60	15.000,00 €			900.000,00 €	810.000,00 €	729.000,00 €
Medium number of active users			30	12.000,00 €			360.000,00 €	306.000,00 €	260.100,00 €
Low number of active users			20	2.000,00 €			40.000,00 €	28.000,00 €	19.600,00 €
<b>Active Union</b>	# of new customer	Total # customers end of period	# of customers	Revenue/yr/customer	Year 1	Year 2	Year 3	Year 4	Year 5
High number of active users	100	200	120	15.000,00 €				1.800.000,00 €	1.620.000,00 €
Medium number of active users			60	12.000,00 €				720.000,00 €	612.000,00 €
Low number of active users			40	2.000,00 €				80.000,00 €	56.000,00 €
<b>Active Union</b>	# of new customer	Total # customers end of period	# of customers	Revenue/yr/customer	Year 1	Year 2	Year 3	Year 4	Year 5
High number of active users	300	500	300	15.000,00 €					4.500.000,00 €
Medium number of active users			150	12.000,00 €					1.800.000,00 €
Low number of active users			100	2.000,00 €					200.000,00 €
<b>Revenue</b>					130.000,00 €	634.400,00 €	1.858.470,00 €	4.236.570,50 €	10.231.863,63 €

## Appendix 10.5: Growth Model



	Total Universities	Targeted	Share
Germany	426	200	46,9% Total available market (TAM)
Stuttgart	27	10	37,0% Serviceable available market (SAM)

## Appendix 10.6: P&L Statement

P&L Statement Annually						
	DEV	LAUNCH	GERMAN EXPANSION			International
	2021	2022	2023	2024	2025	2026
<b>Revenue</b>		130.000,00 €	634.400,00 €	1.858.470,00 €	4.236.570,50 €	10.231.863,63 €
<b>Expenses</b>						
<i>Fixed Costs</i>						
Office rent	11.880,00 €	39.600,00 €	63.360,00 €	63.360,00 €	63.360,00 €	114.840,00 €
Insurance	600,00 €	600,00 €	600,00 €	600,00 €	600,00 €	600,00 €
<b>Total fixed costs</b>	<b>12.480,00 €</b>	<b>40.200,00 €</b>	<b>63.960,00 €</b>	<b>63.960,00 €</b>	<b>63.960,00 €</b>	<b>115.440,00 €</b>
<i>General Expenses</i>						
Marketing	126.880,00 €	15.600,00 €	76.128,00 €	185.847,00 €	423.657,05 €	2.046.372,73 €
Paid Marketing	50.752,00 €	6.240,00 €	30.451,20 €	74.338,80 €	169.462,82 €	818.549,09 €
Organic Marketing	76.128,00 €	9.360,00 €	45.676,80 €	111.508,20 €	254.194,23 €	1.227.823,64 €
Salaries	60.000,00 €	254.000,00 €	458.000,00 €	608.000,00 €	608.000,00 €	1.006.000,00 €
Founders	60.000,00 €	60.000,00 €	60.000,00 €	210.000,00 €	210.000,00 €	210.000,00 €
Sales		36.000,00 €	90.000,00 €	90.000,00 €	90.000,00 €	180.000,00 €
Marketing		20.000,00 €	20.000,00 €	20.000,00 €	20.000,00 €	40.000,00 €
Finance		20.000,00 €	20.000,00 €	20.000,00 €	20.000,00 €	40.000,00 €
Software Development	- €	100.000,00 €	250.000,00 €	250.000,00 €	250.000,00 €	500.000,00 €
Human Resources		18.000,00 €	18.000,00 €	18.000,00 €	18.000,00 €	36.000,00 €
IT costs	65.000,00 €	13.000,00 €	13.000,00 €	13.000,00 €	13.000,00 €	32.500,00 €
Legal fees	6.000,00 €	6.500,00 €	31.720,00 €	92.923,50 €	120.000,00 €	120.000,00 €
<b>Total General Expenses</b>	<b>257.880,00 €</b>	<b>289.100,00 €</b>	<b>578.848,00 €</b>	<b>899.770,50 €</b>	<b>1.164.657,05 €</b>	<b>3.204.872,73 €</b>
<b>Total Expenses</b>	<b>270.360,00 €</b>	<b>329.300,00 €</b>	<b>642.808,00 €</b>	<b>963.730,50 €</b>	<b>1.228.617,05 €</b>	<b>3.320.312,73 €</b>
<b>EBIT</b>	<b>- 270.360,00 €</b>	<b>- 199.300,00 €</b>	<b>- 8.408,00 €</b>	<b>894.739,50 €</b>	<b>3.007.953,45 €</b>	<b>6.911.550,90 €</b>
Interest	- €	- €	- €	- €	- €	- €
<b>EBT</b>	<b>- 270.360,00 €</b>	<b>- 199.300,00 €</b>	<b>- 8.408,00 €</b>	<b>894.739,50 €</b>	<b>3.007.953,45 €</b>	<b>6.911.550,90 €</b>
Tax	- €	- €	- €	268.421,85 €	902.386,04 €	2.073.465,27 €
<b>Net Income</b>	<b>- 270.360,00 €</b>	<b>- 199.300,00 €</b>	<b>- 8.408,00 €</b>	<b>626.317,65 €</b>	<b>2.105.567,42 €</b>	<b>4.838.085,63 €</b>
<b>Profit Margin</b>	<b>-100%</b>	<b>-153%</b>	<b>-1%</b>	<b>34%</b>	<b>50%</b>	<b>47%</b>
<b>Margin before Interest/Tax (for CLV)</b>	<b>-100%</b>	<b>-153%</b>	<b>-1%</b>	<b>48%</b>	<b>71%</b>	<b>68%</b>

Average since 2023:

## Appendix 10.7: Cash Flow Statement

Cash Flow Statement Annually						
	DEV	LAUNCH	GERMAN EXPANSION			International
	2021	2022	2023	2024	2025	2026
<b>CASH AND CASH EQUIVALENTS, BEGINNING OF PERIOD</b>	- €	- 240.360,00 €	- 439.660,00 €	- 448.068,00 €	178.249,65 €	2.283.817,07 €
<b>OPERATING ACTIVITIES</b>						
Net income	- 270.360,00 €	- 199.300,00 €	- 8.408,00 €	626.317,65 €	2.105.567,42 €	4.838.085,63 €
<b>Net cash provided by (used in) operating activities</b>	<b>- 270.360,00 €</b>	<b>- 199.300,00 €</b>	<b>- 8.408,00 €</b>	<b>626.317,65 €</b>	<b>2.105.567,42 €</b>	<b>4.838.085,63 €</b>
<b>INVESTMENT ACTIVITIES</b>						
Capital expenditure	- €	- €	- €	- €	- €	- €
Other investment activities	- €	- €	- €	- €	- €	- €
<b>Net cash provided by (used in) investment activities</b>	<b>- €</b>	<b>- €</b>	<b>- €</b>	<b>- €</b>	<b>- €</b>	<b>- €</b>
<b>FINANCING ACTIVITIES</b>						
Issuance of stock	30.000,00 €	- €	- €	- €	- €	- €
Issuance of debt	- €	- €	- €	- €	- €	- €
<b>Net cash provided by (used in) financing activities</b>	<b>30.000,00 €</b>	<b>- €</b>	<b>- €</b>	<b>- €</b>	<b>- €</b>	<b>- €</b>
<b>CASH AND CASH EQUIVALENTS, END OF PERIOD</b>	<b>- 240.360,00 €</b>	<b>- 439.660,00 €</b>	<b>- 448.068,00 €</b>	<b>178.249,65 €</b>	<b>2.283.817,07 €</b>	<b>7.121.902,70 €</b>

## Appendix 10.8: Investment Proposal

Cash Flow Statement Annually						
	DEV	LAUNCH	GERMAN EXPANSION			International
	2021	2022	2023	2024	2025	2026
<b>CASH AND CASH EQUIVALENTS, BEGINNING OF PERIOD</b>	- €	259.640,00 €	360.340,00 €	551.932,00 €	1.178.249,65 €	3.283.817,07 €
<b>OPERATING ACTIVITIES</b>						
Net income	- 270.360,00 €	- 199.300,00 €	- 8.408,00 €	626.317,65 €	2.105.567,42 €	4.838.085,63 €
<b>Net cash provided by (used in) operating activities</b>	- 270.360,00 €	- 199.300,00 €	- 8.408,00 €	626.317,65 €	2.105.567,42 €	4.838.085,63 €
<b>INVESTMENT ACTIVITIES</b>						
Capital expenditure	- €	- €	- €	- €	- €	- €
Other investment activities	- €	- €	- €	- €	- €	- €
<b>Net cash provided by (used in) investment activities</b>	- €	- €	- €	- €	- €	- €
<b>FINANCING ACTIVITIES</b>						
Issuance of stock	30.000,00 €	- €	- €	- €	- €	- €
Issuance of debt	500.000,00 €	300.000,00 €	200.000,00 €	- €	- €	- €
<b>Net cash provided by (used in) financing activities</b>	530.000,00 €	300.000,00 €	200.000,00 €	- €	- €	- €
<b>CASH AND CASH EQUIVALENTS, END OF PERIOD</b>	259.640,00 €	360.340,00 €	551.932,00 €	1.178.249,65 €	3.283.817,07 €	8.121.902,70 €

## Appendix 10.9: Employee Count

Employees						
	Dev	Launch	Germany			Int
Year	2021	2022	2023	2024	2025	2026
Founders	3	3	3	3	3	3
Sales		2	5	5	5	10
Marketing		1	1	1	1	2
Finance		1	1	1	1	2
Software Development		2	5	5	5	10
Human Resources		1	1	1	1	2
	3	10	16	16	16	29