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# Innovative Business Plan: Enhancing the Student Housing Experience with Hospi

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Master of Science in Business Administration

Supervisor:
PhD, Renato Telo de Freitas Barbosa Pereira, Assistant Professor with Habilitation
Iscte – Instituto Universitário de Lisboa

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BUSINESS
SCHOOL

Department of Marketing, Operations and General Management

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# Resumo

Este plano de negócios explora uma solução inovadora, liderada por estudantes, para a crise global de alojamento estudantil - um problema crescente caracterizado por rendas incomportáveis, condições de vida inadequadas e plataformas de alojamento exploradoras. Com base na experiência pessoal e numa investigação exaustiva, o projeto apresenta a Hospi - uma aplicação móvel concebida para simplificar a procura de quartos e de colegas de quarto compatíveis através de uma interface gamificada baseada na passagem do dedo. A plataforma visa capacitar os estudantes, oferecendo listagens verificadas, filtros avançados e preços acessíveis, tudo num ambiente centrado no utilizador. Lisboa, que enfrenta uma das mais graves carências de alojamento da Europa, foi selecionada como cidade-piloto. Um inquérito realizado junto dos estudantes confirmou a elevada procura de uma plataforma deste tipo, sendo a acessibilidade, a transparência e a compatibilidade social identificadas como necessidades fundamentais. Além disso, a análise de mercado e a avaliação financeira demonstram a viabilidade e a escalabilidade da Hospi, especialmente em cidades com populações estudantis e infra-estruturas digitais em crescimento. Esta tese conclui que a Hospi não só aborda uma lacuna significativa no mercado, mas também redefine a forma como os estudantes encontram alojamento, dando prioridade à segurança, acessibilidade e autonomia num cenário de alojamento cada vez mais mercantilizado.

**Palavras-chave:**
Crise de Alojamento para Estudantes, Plataformas Digitais, Acessibilidade Económica, Correspondência entre colegas de quarto

**Classificações JEL:**
R31 - Oferta e mercados de habitação
M13 - Novas Empresas; Startups

## Abstract

This business plan explores an innovative, student-led solution to the global student housing crisis - a growing issue characterised by unaffordable rents, unsuitable living conditions, and exploitative housing platforms. Drawing from personal experience and comprehensive research, the project introduces Hospi - a mobile application designed to simplify the search for rooms and compatible roommates through a swipe-based, gamified interface. The platform aims to empower students by offering verified listings, advanced filters, and affordable pricing, all within a user-centric environment. Lisbon, facing one of Europe's most severe housing shortages, has been selected as the pilot city. A survey conducted amongst students confirmed high demand for such a platform, with affordability, transparency, and social compatibility identified as key needs. Additionally, market analysis and financial valuation demonstrate the viability and scalability of Hospi, especially in cities with growing student populations and digital infrastructure. This thesis concludes that Hospi not only addresses a significant gap in the market but also redefines how students find housing, prioritising safety, affordability, and autonomy in an increasingly commodified accommodation landscape.

**Keywords:**
Student Housing Crisis, Digital Platforms, Affordability, Roommate Matching

**JEL Classifications:**
R31 - Housing Supply and Markets
M13 - New Firms; Startup

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# 1. Introduction

## 1.1 Motivation & Objective

The motivation for this business plan stems from personal experience with the student housing crisis, whether in the Netherlands, the USA, or Portugal. In every study experience, the housing crisis has followed. From experiencing discrimination, room shortages, living in a converted standard room or an old converted office block, to experiencing landlords whose primary focus has been maximising their income rather than providing a pleasant experience for their tenants.

With the prevailing student housing crisis across the globe and living in a digital era, the opportunity for a student-led solution is now. Students have begun to use their social networks to find housing rather than going through digital platforms, landlords, or private Purpose-Built Student Accommodation (PBSA) housing. Using already formed social networks can help find accommodation; however, it can sometimes be unsuccessful if contacts are limited in the prospective student city. Therefore, this business plan aims to create an application where students can connect and arrange housing, whether looking for a room or roommate.

The objective of this plan is to help national, international, and exchange students find suitable housing at an affordable price, as well as to inform them when they make their choice of who they will be living with. The platform also helps students with spare rooms in their homes find compatible roommates, increasing the chance that the students moving in will contribute positively to the home environment. Ultimately, the objective is to give the students the power when making housing decisions. This can all be done in one place, easily and affordably, on the app.

## 1.2 Identification of the Innovative Proposal

The idea for this innovative business plan was inspired by a clear gap in the market for a platform specifically designed to support students in securing suitable and affordable rooms or finding a compatible roommate. In Lisbon, the use of housing platforms is widespread amongst students. However, many users face significant challenges in finding options that meet their personal needs and finances and give complete information on the current residents. Students feel that existing platforms prioritise profit over user experience and may feel that the housing company does not consider their best interests.

This business plan introduces an innovative mobile application that transforms the student housing search by combining room and roommate options in one intuitive experience. By utilising a swipe-based, gamified interface, the app allows users to browse through room or roommate listings based on filtering for preferences such as lifestyle, location, or room pricing. Ultimately, the aim is for the users to find their match (swipe-to-match) - a suitable roommate for the empty room and vice versa.

Key features of this application, determined through market research, are as follows: filters for lifestyle, location, and pricing, identity verification, and low entry costs to the application. In this way, users can quickly find housing options that fit their needs and feel safe and secure whilst using the application. This application functions as a two-sided digital marketplace, benefiting both parties. The initial launch will take place in Lisbon as the pilot city, with the long-term vision of expanding into other major student cities across Europe and, eventually, creating a global go-to solution for student accommodation.

# 2. Literature Review

## 2.1 A Global Student Housing Crisis

Students worldwide are experiencing challenges in finding suitable housing to live in during their studies. Whether national, international, or exchange students, they can all relate to this issue somehow. Housing has become inaccessible and unaffordable for many students.

As Higher Education Institutions expand and attract more students, the student towns and cities are experiencing severe housing shortages (Shea, 2023). This has increased rental prices, making it difficult for students to find affordable accommodation. Rental prices have increased across European student cities by 18.5% between 2010 and 2022 (González, 2023). In addition to this, Higher Education Institutions usually do not provide help or housing for their incoming students (Sotomayor et al., 2022) and leave it up to the students to arrange accommodation through their network, social media pages, housing platforms, private housing sector or private Purpose-Built Student Accommodation (PBSA) functions. These avenues of house hunting come with many challenges, which will be discussed further in this literature review.

Mackie (2016), who carried out research in Europe and Asia, found that a key reason for students not to move out of their homes is the lack of affordability, suitability, and availability of housing for young people, which is halting the beginning of their independence. Additionally, most students cannot afford to live in their own place. Resorting to house sharing can be problematic as the housing is generally not suited to their needs, lacks a communal space, and forces students to live with strangers, who may be incompatible with their living expectations (Mackie, 2016). Sometimes, this deters students from moving out of home to begin or complete their student experience.

International students also struggle to secure housing, facing significant barriers that impact their well-being, academics, and finances. A study by Sotomayor et al. (2022) in Toronto, Canada's largest city for student enrolment and international student acceptance, highlights these challenges. The research suggests that structural issues contribute to housing and economic stress among international students, affecting their academic performance, health, and overall well-being. This study also discusses the "hidden curriculum" of student commodification, normalising the socio-economic burdens placed on students. This has led to

increased marginalisation and the emergence of social hierarchies based on race, age, class, and gender (Sotomayor et al., 2022).

Students in the Erasmus+ programme, a semester's exchange to a country within Europe, have also experienced difficulties with housing. A collaboration between the European Students Union and Erasmus Student Network resulted in a research report based on 8000 surveys completed by Erasmus+ students. It suggested many housing challenges these students face before and during their mobility. Over half of these students pay more than €400 monthly for accommodation, whilst a quarter encounter housing scams during their search. Additionally, a third of them receive no support from the Higher Education Institution when planning and searching for accommodation. Many Erasmus+ students also face limited transparency: 41% report inadequate information about housing conditions, and 49% must pay deposits exceeding one month's rent. These issues lead to low satisfaction with housing experiences among Erasmus+ students (González, 2023). Many students turn to Purpose-Built Student Accommodation (PBSA) and housing platforms, likely due to their limited social networks within the host city and short-term rental options.

### 2.2 Popular Accommodation Avenues

As mentioned previously, students use many avenues to find accommodation, whether informal or formal. A popular way to find a place to stay is through social networks. This includes friends, family, or contacting students who have studied previously or are studying in the target city. This can lead to an easier transition, support, and ultimately avoid booking fees, higher prices, and the risk of being scammed.

However, students may have no connections to their study city and generally have less social and cultural capital compared to local students (Zielinski, 2019). Therefore, if they aim to secure housing informally, they will likely turn to social media channels such as Facebook housing group chats. Although some students may secure legitimate housing using this method, in many cases, students experience scams, heavy competition, and online discrimination (Sotomayor et al., 2022). For example, a significant issue for international students in the Netherlands is the ‘No Internationals’ requirement for Dutch students when looking for room advertisements on Facebook. This has been recorded as high as 40% of advertisements in some

housing group chats (Zielinski, 2019). In addition, students may be disadvantaged when they are not yet in the country or city where they will be studying.

For these reasons, students turn to private PBSA options or book a room online through one of the many housing platforms available. These two avenues are useful to international students as they don't have to worry about discrimination, having to be in the city beforehand to meet the landlord, or, in most cases, reducing the risk of potentially being scammed. However, private PBSA and housing platforms have contributed to the increase in the unaffordability of accommodation and other unique disadvantages.

### 2.3 The Problems of Private PBSA

Over the last 10 years, the number of students has risen significantly for many popular student destinations in the European Union and the United Kingdom. The estimated number sat at 21.7 million in 2022/2023 and is projected to grow another 10% by 2030 (JLL Sweden, 2024). This has led and will lead to an urgent need for more beds for students to be accommodated, attracting institutional investors to develop Purpose-Built Student Accommodation (PBSA) (Cocola-Gant & Calvo, 2023). Privately owned PBSA makes up 40% of the European market (JLL Sweden, 2024).

The growing student population has created an apparent demand for additional student accommodation, yet challenges persist in meeting the need. In Edinburgh, for example, Kallin (2024) reported that the number of PBSA units has surged in recent years, with the current number of beds standing at 12,903 and another 6522 in the pipeline for development. However, these privately owned buildings can be lucrative and controversial (Kallin, 2024) for several reasons.

Firstly, many privately owned PBSAs are unaffordable for most students as they often prioritise luxury features such as gyms, rooftop bars, and cinema lounges to appeal to a wealthy international student market (Lee, 2024). This focus on premium amenities drives up costs, leaving most students unable to afford such accommodation. In some PBSA units, students are being charged double the rent per week compared to their peers living in multiple-occupancy housing (Kallin, 2024). As a further consequence of the high pricing of PBSA, this has

exacerbated the housing crisis, making accommodation increasingly inaccessible for both the student and the local population.

Secondly, students report various challenges whilst living in private PBSA, impacting their quality of life and mental well-being. A significant concern for many is the difficulty in establishing a sense of 'home' when living in these units. This has been brought about by restrictions on personalising rooms and, in some cases, strained relationships with housemates, preventing students from feeling comfortable and at ease in their living spaces (Mochan, 2024). Further complicating matters, some PBSA configurations hinder social interactions due to structural and layout choices. For example, a study in Sweden found that building design can negatively affect social experiences among students (Ilstedt, 2022). Not only can the layout and social environment be an issue for students, but construction delays are another common issue. In 2019, 23 new PBSA developments in the United Kingdom were not ready for the start of the academic year, forcing students into incomplete or unsuitable living arrangements (Busby, 2019). The rigidity of tenancy agreements also poses a problem. Many contracts lack flexibility and make it difficult or even impossible for students to leave if the accommodation does not meet their needs (Mochan, 2024). Factors such as these - high costs, limited social opportunities, and quality of accommodation - have a considerable impact on students' overall experience in PBSA and can ultimately affect their mental health and well-being (Milne, 2019).

Moreover, ambiguity around responsibility and governance within PBSA worsens these challenges. Whether that be concerns around mental health, building delays, or general student complaints. Mental health concerns among students in private PBSA raise critical questions about who is accountable for their welfare: the accommodation provider or the university (Milne, 2019). For example, during the COVID-19 pandemic, when many students were still required to live in private PBSA, some students reported frequent check-ins from their accommodation provider, whereas in other cases, students felt that their provider was distant (The Scottish Government, 2022). Alternatively, some students report not knowing who to go to with their concerns and seemed to realise that the responsibility had been handed over to a third party (The Scottish Government, 2022). When accommodations are substandard, incomplete, or delayed, students are frequently left without clear sources of support from either party, creating a gap in responsibility. This lack of clarity and support, combined with inflexible

tenancy agreements that trap students in unsatisfactory environments, underscores the need for more robust governance and more precise lines of accountability within the PBSA sector.

### 2.4 The Rise of Student Housing Platforms

Student housing platforms have risen in recent years due to the growing demand for additional accommodation avenues and options for students. Traditionally, accommodation search and securing occurred through word of mouth and networking (Cocola-Gant & Calvo, 2023). In today's world, the digital interface is more convenient, faster, and may seem more trustworthy (Cocola-Gant & Calvo, 2023). This has become a popular way for students to find their place to stay. In some student cities, such as Sydney, one study reported that over half (58%) of participants found their shared room through a digital platform (Nasreen & Ruming, 2021). These platforms use algorithms, reviews, and verification processes to create a more personalised and safer experience (Berlind, 2024). However, there is a big question about the affordability, suitability, and governance of accommodation found on these platforms for students and its secondary impacts on the local housing markets.

Firstly, affordability is a rising issue when booking a room through student housing platforms (Nasreen & Ruming, 2021). Many digital housing platforms use a dynamic pricing algorithm to determine the monthly rent prices of the rooms on the website based on the market demand (Zhu et al., 2019). In many cases, this is a losing battle for students since the number of students at Higher Education Institutions constantly rises, increasing the demand for more housing. Moreover, these platforms frequently require students to pay a hefty booking fee and deposit upfront, creating an additional financial burden. These fees are charged as part of the platform's service model, generating revenue at the expense of the user's accessibility to housing. Once again, exploiting the student population and honing into student commodification. In addition, many of these platforms hold a vast number of property listings in cities, creating an even further lack of housing. For example, a study in Lisbon found that the housing platform, 'Uniplaces,' privately lists around 6000 rooms which are only accessible to those paying for the platform's service. This practice contributes to the lack of publicly available student housing, leaving just 10,000 rooms accessible through public channels (Calvo, 2021). This impacts students significantly, but this also effects the local population,

who are now being pushed out of the city due to the housing crisis in Lisbon (França et al., 2021).

Secondly, some students experience misinformation pre and post-booking their room using a student housing platform. Before booking, students may not be given complete information regarding the property, including its location, the physical condition of the property, details of the landlord, and those with whom they will share the apartment (Nasreen & Ruming, 2021). This lack of transparency can lead to situations where students are misled about the accommodation they have booked and, upon arrival at the property, discover conditions that they did not anticipate. This leads to the issue, similar to PBSA, of the lack of governance and responsibility. In cases where students arrive in unexpected housing situations, it is unclear who takes the responsibility to help the student. In addition, when students are having issues with the property or their landlord, the housing platform does not take any further responsibility to help the student out (Nasreen & Ruming, 2021).

Moreover, these platforms do not let students know with whom they will share the accommodation before arrival. In some cases, this can be challenging for students as they may experience a household with incompatible housemates. Problems and incompatibilities between housemates may occur for several reasons. This could be due to the shared responsibility of bills, domestic work, differences in the expectation standards of cleanliness, tidiness, and sociability, power imbalances and ownership of household items, invasions of privacy and boundaries, or tensions over noise (Clark et al., 2020). Furthermore, the incompatibility of characteristics of housemates may cause issues within the household. For example, a study in New Zealand found that individuals sharing accommodation had strong preferences when selecting future housemates. This included being of a similar age, employment status, drug and alcohol use, cultural and language similarities, mental health, and even dietary requirements, all playing a role in who they chose to live with (Clark & Tuffin, 2014). Ultimately, living with incompatible housemates, in whatever sense, can lead to problems of stress, anxiety, and sometimes depression (Farah et al., 2022).

## 2.5 The Case of Lisbon

The issues personally faced as a student studying in Lisbon ultimately inspired this business idea. Therefore, Lisbon will be the pilot city for this venture. It is important to understand the city's nature, its challenges, and how this impacts the students and local population of Lisbon.

Lisbon has recently become one of the most visited and touristified cities within the European Union (Calvo, 2021) and, for this reason, now faces a growing housing crisis. The growth of tourism and foreign investment in short-term rentals such as Airbnb have displaced locals and pushed rents to an unsustainable price (Neto & Ribeiro, 2024). Many homes stand empty due to Golden Visa holders' ownership, a policy Portugal previously implemented to attract foreign investment. This crisis is ultimately the result of the lack of governmental regulation of the housing market, the private markets' failure to provide affordable options, and, for the students, the university's insufficient investment in student housing (França et al., 2021).

Lisbon's housing crisis particularly impacts the student accommodation market. With an increasing number of international students, totalling approximately 17,900 in the city (Calvo, 2021), along with the overall student population of 131,000 (Savills, 2023), the demand for student housing has soared. However, the public housing supply remains scarce (Neto & Ribeiro, 2024), and affordable student beds are limited, with only 12,500 for Lisbon and Porto in total (Savills, 2023). The student residence market in Portugal is relatively new and has been unable to keep up with the increasing demand (Savills, 2023). As a result, students are often finding themselves paying high prices to rent a room. One study found that students are paying, on average, 607 euros per month for a room; in general, rental prices have increased by more than 60% since 2017 (Calvo, 2021).

As Lisbon continues attracting international students to the city, many feel that their presence contributes to the housing crisis (França et al., 2021). On top of this, they feel dissatisfied with the accommodation options they are given as students. A study based on interviewing 21 international students revealed that many felt that they were being overcharged for the standard of housing they were receiving and were provided with informal or no contracts, leading to a feeling of vulnerability and exploitation (França et al., 2021). Both domestic and international students feel they are being marketed as a financial asset to the city,

with platforms such as Uniplaces taking advantage of the lack of affordable housing options (França et al., 2021). As a result, the housing market has become a place where the student's needs are pushed to the side in favour of profit. Without significant investment from universities and government intervention, Lisbon's housing crisis will likely continue to deepen, further complicating the city's ability to provide affordable housing for students and residents.

### 2.6 Conclusions

In conclusion, finding affordable and suitable accommodation is a struggle for students across the globe. National, international, and short-term exchange students all experience the same issues when leaving home and finding a place to call their own. As Higher Education Institutions admit more students and attract a more international cohort, this has led to a higher demand for housing in the towns and cities, therefore driving up the prices for the limited number of rooms available. In addition, private investors and entrepreneurs have taken this as an opportunity to commodify students and their needs for accommodation further. Digital platforms and private PBSA offer accommodation at very high prices, which is unobtainable for most students. Moreover, both avenues of accommodation hunting come with their fair share of problems. Both digital platforms and private PBSA units lack governance, can be unreliable and misrepresentative of what the student signs up for, and may leave the student in a poor social environment due to the people they share the accommodation with, or the lack of living area and common spaces provided to them. All these factors can play a role in the stress and ultimately the student's well-being. Due to the increase in popularity of Lisbon, the incoming number of international students has grown. Therefore, this further amplifies the effects of the current housing crisis and fuels student commodification through digital platforms and private PBSA companies. Lisbon is now one of the cities with the greatest housing crisis in Europe (Caldero, 2024), which is also impacting the students, leaving them with unsuitable, poor, and substandard living conditions whilst still paying hefty rental prices at the same time. More needs to be done to protect the students from such exploitation, which is up to the universities and governments. However, providing a student-led solution through this business plan aims to ease the painful housing experience for the students.

# 3. Methodology

There are three areas to investigate to ensure the business plan is viable. Firstly, the student housing crisis must be understood in order to develop a solution. This has been done through a review of the literature. Secondly, the value proposition of the business idea must be tested. The best way to do this was to go to the students themselves and see their perspectives through a survey. Lastly, the business must be financially sound; therefore, completing a valuation through the discounted cash flow method has been completed.

## 3.1 Literature Review

A review of existing literature was conducted to discover the current student housing crisis worldwide and determine that the business plan will be applicable globally. In addition, research on the literature for Lisbon's specific housing crisis has been reviewed.

Before beginning the search for the literature to review, a criterion was set. The criteria for finding academic journals, peer-reviewed articles, and books were used to ensure the literature was relevant and reliable. These sources were taken from websites such as Scopus, ResearchGate, Jstor, Google Scholar, and PubMed. Additionally, a period of 15 years was set to ensure that the reviewed literature was the most relevant and up to date it could be. In some cases, the topic is still largely undiscovered; therefore, news articles were viewed to see how the student housing crisis is unfolding in different cities across the globe year by year. Based on these conditions, the keywords were then used to search for the data.

A conceptual framework has been developed using keywords from the existing literature. Keywords include Studentification, Digital Platforms, PBSA, Student Housing Crisis, Affordability, Accessibility, and Suitability.

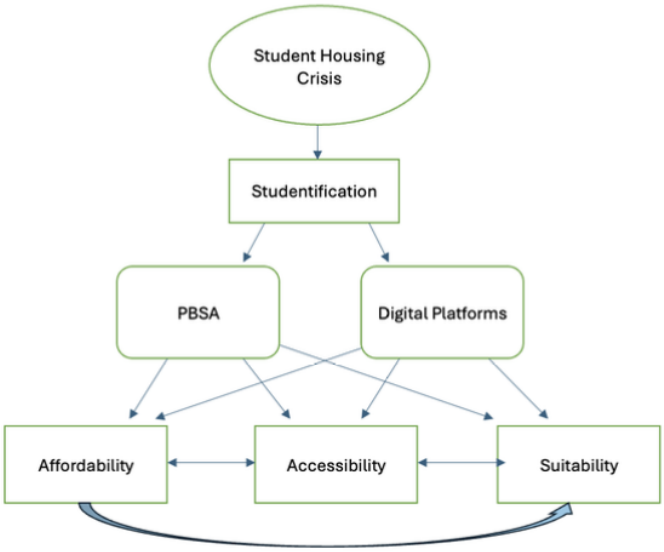



*Figure 1. Conceptual Framework. Source: Author*

## 3.2 Testing the Value Proposition

### A. Research Design

**Objective of investigation**

The objective of conducting this primary research is to test the business plan's value proposition and gain insight into the current market. To understand the need and opportunity to create a business plan in response to the current student housing crisis and increase in student commodification. To gain a deeper insight into the students' thoughts, feelings, and experiences of the student housing crisis and their openness to using an application to find their room or roommate. The findings from this research will contribute to developing a business plan tailored to students' needs.

**Method of investigation**

A survey with both quantitative and qualitative type questions was created to conduct this research. This approach allows for efficient data collection from a broad sample of students, capturing a wide range of perspectives within the target population. A survey enables the research to measure both the extent of housing difficulties experienced by the students and the

attitudes towards a digital solution on a large scale, providing statistical insights that can help with the decision-making of the application design. Additionally, by using a survey, patterns can be identified across the demographic subgroups such as age, academic level, and current housing status. Allowing for a comprehensive understanding of varied student experiences. Using a survey methodology will gather standardised data, facilitating comparisons of data trends and making it possible to generalise findings to the broader student population.

## B. Target Population & Sampling Method

### Population

Since the target market for this business plan is students, the target population under investigation is also strictly students. Specific demographics criteria include students aged between 18 to 30 years of age, who are currently enrolled in an undergraduate or graduate programme at a Higher Education Institution.

Reasons for this criterion are as follows: Those between 18 and 30 years of age are often in the process of transitioning between living at home and finding affordable accommodation and therefore are more likely to face housing instability. Students must be enrolled in an undergraduate or graduate programme at a Higher Education Institution, as once again, this application is exclusive to students.

### Sampling Method

For this investigation, a convenience sample was used. Surveys were sent out via social media, on platforms such as Instagram and Whatsapp. This allowed for participants and data to be collected quickly**,** provided a readily available sample and did not require funding.

### Sample Size

31 individuals completed the survey.

### C. Survey Design

The research survey is structured in three main sections: 1) General questions about student demographics such as age, location and level of study 2) Questions regarding their experience with the housing crisis 3) Questions regarding their acceptance and openness to using a student application platform to search for housing or search for a roommate. Question format varies, with 20 being that of a multiple-choice question and four being open-ended questions, to gather both quantitative and qualitative data providing richer and possibly more insightful information from participants, whilst still being quick and efficient for the participant. This survey was pretested amongst five individuals, to refine questions when necessary, ensuring reliability of results. Data collection period ran for one month, to give enough time to obtain the largest possible sample.

### D. Ethical Considerations

It is important to consider the ethics and safety of the investigation and participants before, during and after the experimentation period. For this study, participants were provided with information prior to beginning the survey, so that they could make an informed decision when consenting to participating. Secondly, all responses to the survey have been kept confidential and anonymous. Participants are also given the right to withdraw their responses at any moment and have been given the contact information of the investigator, to get in touch if necessary.

## 3.3 Evaluating the Financial Viability

To assess the financial viability of Hospi, a detailed financial model was developed, incorporating key components such as cost projections, sales forecasts, income statements, and cash flow statements over a five-year period. This period spans the initial launch and expansion into two additional countries, Spain and the Netherlands. A Discounted Cash Flow (DCF) analysis was performed using the perpetuity method. This was conducted by discounting the free cash flow, using the weighted average cost of capital (WACC) which was determined using benchmarks from industry standards. In addition, the enterprise value was calculated, to demonstrate the value of the business at the current time, providing a clear picture of Hospi's financial outlook and suggesting its strong potential for long-term growth and profitability.

# 4. Testing the Value Proposition Findings

A survey was carried out to define the value provided for the target market and determine whether this business venture would solve one aspect of the student housing crisis.

The demographic of this survey comprises a majority (93%) of younger students aged 21 to 26. Three-quarters of these participants were female and/or master's students. Their living situation varied, with the majority (60%) living in shared apartments with most likely a stranger (43%) or with a previously known friend (23%). Over half (56%) of participants were satisfied with their accommodation.

When determining the pain points for the students, the biggest concern was affordability (high rent prices), followed by lack of availability and poor living conditions. When asked about finding and living with compatible roommates, more than half (58%) of participants have had difficulty finding a good fit. Participants also mostly took between 1 - 3 months to secure their accommodation, with the most popular methods of finding it being through online housing platforms or their network and connections.

With regards to the willingness and familiarity of students to use applications/platforms to find accommodation (or roommates), 80% of participants have used an application/platform in the past. Popular sites include Idealista, HouzeStudent, Uniplaces, and Erasmus Housing. However, only 56% of these participants were satisfied with their experience. This led to the question of the likelihood of participants using a student-led housing/roommates application. Results suggested that 84% of participants were either likely or very likely to use a student-led application with preferences for filters and verified listings. Within this, 61% of participants were willing to pay a one-time fee to access the app, but only 34% were willing to pay up to or between five to ten euros.

# 5. Market Analysis

The purpose of this section is to understand the demand, supply and overall landscape of the target market. As aforementioned, this study focuses on Lisbon as the pilot city for the business plan. Therefore, the information found and provided is mostly in the context of Lisbon. The current and projected student housing market, as well as the student population and trends will be analysed.

## 5.1 Current & Projected Student Housing Market Overview

In 2023, the global student housing market was estimated at 11.43 billion USD, reflecting the increasing demand for more accommodation options worldwide. This market is projected to grow at a compound annual growth rate (CAGR) of 5.1% between 2024 and 2030, as Grand View Research (2024) reported. This growth is driven by the rising number of students pursuing higher education, especially those choosing to study internationally. The student housing sector in Europe is growing even faster, with a projected CAGR of 5.6% (Grand View Research, 2023). This regional growth could be attributed again to the international students and ease of international mobility thanks to programmes such as the Erasmus Mundus.




*Figure 2. Student Accommodation Market Size. Source: Grand View Research, 2024*

On a local scale, Lisbon's housing market continues to boom, and it is clear that a diverse demographic fuels the demand for rentals in Lisbon, one of the main ones being students seeking short-term rental accommodation (Donaldson, 2024). This boom, which will continue into 2025 and onwards, reflects Lisbon's increasing appeal as one of Europe's most attractive cities for property investment. The current market is characterised by a significant shortage of

properties, with a shortfall of approximately 300,000 homes and demand consistently outpacing supply (Redação, 2024). This shortage in supply has led to an increase in the annual house price index of 7.8%, resulting in a total of 37,125 dwellings sold in 2024, amounting to 7.9 billion euros (Barr, 2024). Housing scarcity, along with an increase in attraction and demand, has driven up both rental and purchase prices. This has and will continue to impact the student housing market conditions. Once again, the growing demand for student accommodation, driven by the increase of local and international students, has led to a shortage in student housing supply. The situation is worsened by Lisbon's appeal as a destination for expats and digital nomads, who usually seek short-term rental options.

Additionally, the rise in tourism has created an interest in short-term rental platforms, which are often yielding higher returns for landlords than traditional, long-term rental leases (Donaldson, 2024). This rapid increase in house and rental prices has raised concerns about accessibility and affordability and is one of the key trends emerging in the housing market (Donaldson, 2024). There is a need for affordable housing solutions, especially for students and lower-income groups.

### 5.2 Current & Projected Student Population Overview

To understand the student housing market, it is necessary to examine the projections for the student population, student mobility, and co-living trends. This will give insight into how the market will suit this business plan.

Over the last two decades, the global number of students pursuing tertiary education has grown significantly, more than doubling to reach just below 250 million in 2020. Student populations in Central and Eastern Europe are the highest, followed by North America, Western Europe, Latin America, and Sub-Saharan Africa. In addition to this dramatic increase in overall enrolment, the number of students pursuing education outside their home country has tripled during the same period, reflecting the growing trend of international mobility amongst students (UNESCO, 2022). As an indicator, in 2021, over 6.4 million students were studying abroad, an increase of 4 million since the year 2000 (*International Students*, 2024).

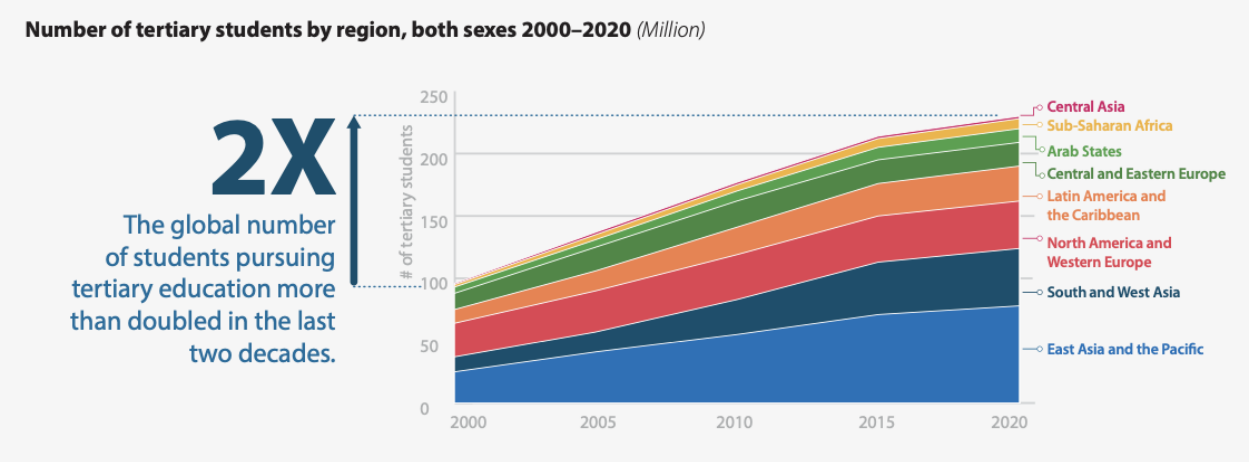



*Figure 3. Number of tertiary students by region, both sexes 2000-2020. Source: UNESCO, 2022*

As of 2022, Western Europe's Gross Enrolment Ratio (GER) reached 81% (UNESCO, 2022). The GER is a statistical parameter that measures the education index of a country or, in this case, a continent (Bihari, 2023). This figure means that the total number of students enrolled in higher education regardless of age was equal to 81% of the population of the official age group for higher education in Western Europe. In Portugal, it was reported in 2023 that 446,028 students were enrolled in higher education, which was around a 3% increase compared to the previous academic year (Savills, 2023). In addition to this, Portugal was reported to have the highest growth rate of international students in Europe (Lima, 2024), with approximately 78,113 international students in the academic year 2022/2023, which was an increase of 253% from 2010/2011 (Savills, 2023).

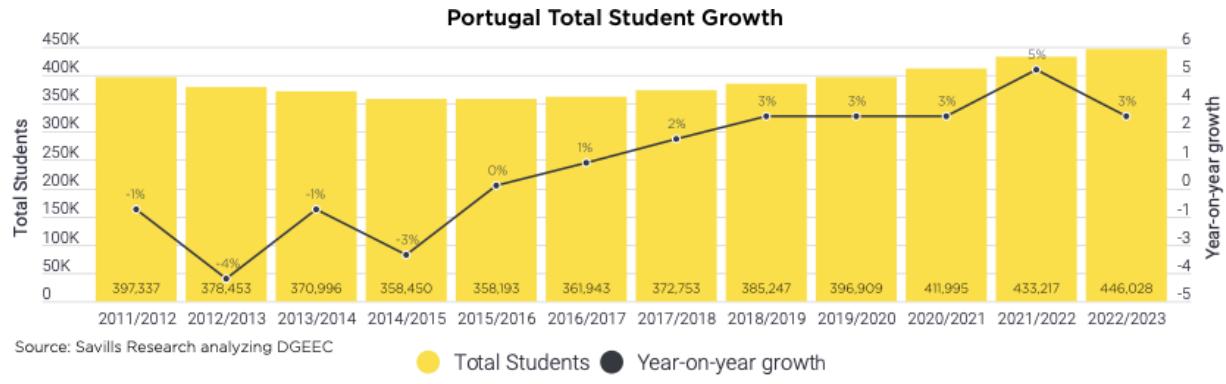



*Figure 4. Portugal Total Student Growth. Source: Savills, 2023*

Coliving is also on the rise in Portugal. Contributing factors include increased digital nomads and international students seeking a sense of community and a more flexible way of living (Savills, 2023). Coliving refers to offering private bedrooms in furnished homes or PBSA units, with shared communal spaces like kitchens and co-working areas. It is popular

amongst students, digital nomads, and young professionals as it fosters a sense of community and allows residents to live in centralised areas at a lower cost (Precision Reports, 2024). In fact, the global coliving market reached a value of 1997.31 million USD in 2023 and is expected to reach 10743.58 million USD by 2030, a CAGR of 27.17% (Precision Reports, 2024).

This analysis of the housing market, student population, and rise in coliving demonstrates a growing demand for housing solutions, particularly for students and young professionals in cities that experience housing crises, such as Lisbon. The growth in the housing market demonstrates that the current demand for housing will not be subsiding anytime soon, and the market will stay lucrative. In addition, as projected, the number of students globally and international mobility students will keep increasing until at least 2030. This enforces the need for student housing options that are accessible and affordable for the demographic. Moreover, the market for coliving is expanding significantly and is projected to continue doing so, indicating that the trend or necessity of coliving will stay on the rise in the coming years. Therefore, the market is suitable for new entries such as this proposed business plan due to these factors.

# 6. Business Environment Analysis

## 6.1 The Housing Market and Choices Over Time

Traditionally, finding accommodation was time-consuming as it involved looking through newspapers, using word-of-mouth, calling multiple landlords, and scheduling several viewings (Clarew, 2024). However, the rise and advances of technology have revolutionised how all home hunters find their properties, and because of this, it is a much more streamlined process. Nowadays, most housing searches rely on online listing platforms and services (Delclós, 2020). The rise of e-commerce and virtual economies has ignited the expansion of the online rental industry and ultimately led to more people finding their accommodation online and using rental platforms to market the accommodation that an individual may want to rent out (Saha, 2023). One figure estimated that 95% of online home searching involves websites, of which 72% are from a mobile app (Ullah et al., 2021). It is estimated that by 2040, 95% of global purchases will be made through online platforms, in website or app format (Ullah et al., 2021).

## 6.2 The Online Housing Market Industry

The global online housing market is projected to grow significantly in the next seven years to reach an estimated valuation of 48.76 billion USD by 2031, reflecting a compound annual growth rate (CAGR) of 13.1% (Coherent Market Insights Pvt Ltd, 2024). Reasons for this increase include the rising urban population, increased real estate investment for rental purposes, and the growing demand for convenient and flexible housing options, especially amongst the younger generations (Industry Expert Techniques, 2024). The sharing economy and collaborative consumption trends have further expanded the adoption of digital platforms for finding and renting accommodation (TrustRadius, 2019). Technological advancements such as AI-driven algorithms, virtual reality home tours, and integrated payment solutions are improving the experience and fuelling market expansion (Blazew, 2024). So far, the market has been dominated by the United States. However, Asia-Pacific is the fastest-growing region due to rapid urbanisation, rising incomes, and increased internet and smartphone usage. Southeast Asia, Latin America, and Africa present opportunities as emerging markets (MarketQuest Solutions, 2024).

## 6.3 Student Methods of Finding Accommodation

It is essential to understand how students commonly find housing to create a suitable business environment for this idea. According to the International Student Housing report by the

Erasmus Student Network and the European Students' Union, the second most popular method of finding accommodation was through online platforms, with approximately 17% of the 6,886 respondents using this approach (González, J. 2023). The most common method among Erasmus students was finding housing provided by their university.

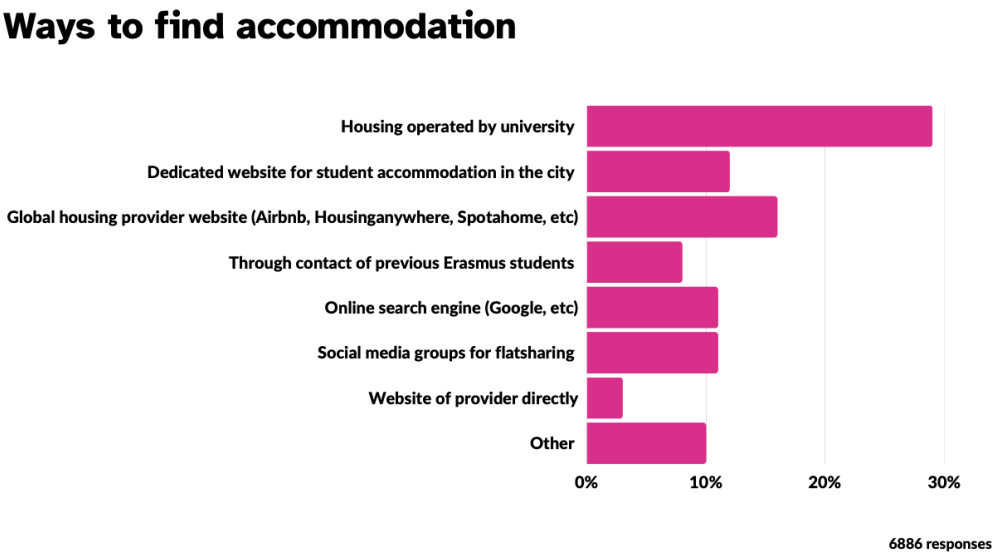



*Figure 5. Ways to Find Accommodation. Source: González, J. (2023).*

Additionally, this question was also asked through the primary research survey, carried out to evaluate the value proposition of this business plan. Results suggested that the most likely method of finding housing was through online platforms/applications with 44% of participants choosing this method.

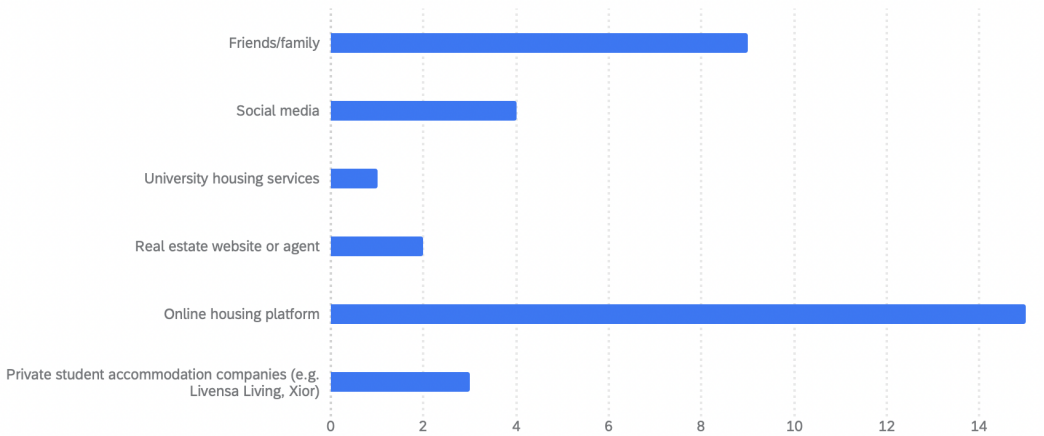



*Figure 6. Ways to Find Accommodation. Source: Author*

# 7. PESTLE Analysis

This analysis focuses on the external environment of the business in Lisbon. The political, economic, social, technological, legal and environmental factors which may play a role in the success or challenges faced by the business.

## 7.1 Political

A member of the European Union (EU) and eurozone, Portugal is fully unified within the EU and follows most of the directives from the European Commission in Brussels (*Portugal - Market Overview*, 2024). Portugal currently works under the civil law system and has a governmental type of a semi-presidential republic (*Portugal - the World Factbook*, 2024). The country's political system currently ranks at 52 out of 193 countries (*TheGlobalEconomy.com*, 2023). From this statistic it is implied that Portugal is a relatively politically stable country.

Portugal is recognised as an open economy and a business-friendly location (AICEP, 2024), strategically positioned to attract international investors and foster entrepreneurship. The country has accelerated in becoming increasingly internationalised, which is part of a strategic goal driven by the Economic Diplomacy pursued through the Ministry of Foreign Affairs and the AICEP Portugal Global (*Internationalization of the Economy*, n.d.). This has been done through economic and commercial efforts and tax agreements. The AICEP attracts foreign direct investment, supports and promotes Portuguese brands globally, and exports goods and services (*Portugal - United States Department of State*, 2024). Additionally, the government has set up schemes to help get businesses started and create a new perception of an easier regulatory environment, reducing bureaucracy and facilitating company incorporations through programmes such as the 'Business in an Hour' (*Portugal - United States Department of State*, 2024). The Portuguese government also joined the World Trade Organization's Investment Facilitation for Development Agreement, which aims to 'improve the investment and business climate and make it easier for investors in all sectors of the economy to invest, conduct their day-to-day business and expand their operations' (*WTO Investment Facilitation for Development Agreement*, n.d.). The Portuguese Startup and Scaleup Law enhances the political environment for entrepreneurship, putting the country on a competitive level with other European countries and ensuring optimum conditions for founding, maintaining, and growing startups (J+Legal, n.d.), reinforcing Portugal's reputation as a hub for innovation and business development.

Concerning the current housing political environment, the government is putting efforts into tackling the ongoing housing crisis and improving public housing, youth housing, and housing accessibility (The Portugal News, 2024). The government has set up a handful of schemes to tackle the housing affordability and accessibility problem. For example, the Recovery and Resilience Plan (PRR), which began as a response to the outcome of the COVID-19 crisis in Portugal, includes targets to unlock 25,000 homes to improve accessibility to housing (The Portugal News, 2024). The PRR also aims to improve higher education through the PNAES scheme, which relies on multiple stakeholders, including the local authorities, social bodies, and Higher Education Institutions (Eurydice Unit Portugal, 2023). The National Plan for Housing in Higher Education (PNAES), the most significant investment ever in student housing, aims to create new residences and rehabilitate old buildings, especially where there is more demand for student housing. To offer more housing with better conditions (Eurydice Unit Portugal, 2023). These two schemes show how the Portuguese government recognises the housing crisis and has made efforts to ease housing accessibility and affordability for all, especially students.

### 7.2 Economic

Portugal's economy is characterised by a strong services sector dominated by tourism, banking, personal consumption, and travel. These sectors played a crucial role in the country's post-pandemic recovery, as targeted efforts to support them led to significant economic growth (*Portugal - the World Factbook*, 2024). Due to the efforts to revive Portugal's post-pandemic economy, which have been in action since 2022, GDP increased by 6.8% and continued to grow over the years, tripling the expected 2023 EU average of 0.9% at 2.7% (*Portugal - Market Overview*, 2024). On top of this, between 2022 and 2023, inflation decreased substantially to 4.31% from a high of 7.83% (*Portugal - the World Factbook*, 2024), signalling improved economic stability. These outcomes reflect the efforts of Portugal's economic policies, perhaps from the PRR. Lower inflation eases cost pressures for citizens and businesses, boosting consumer confidence and purchasing power whilst creating a positive environment for investment and growth.

Portugal offers a competitive business environment with corporate tax rates for small and medium-sized enterprises starting at 12.5% on the mainland of Portugal (João Raínho, 2024) and a VAT rate of 23.05% (*Portugal - the World Factbook*, 2024). Foreign direct

investment (FDI) has been steadily increasing, with the country ranking third for the highest growth rate in the number of FDI projects and second most open country for FDI (AICEP, 2024). Additionally, Portugal registered 200 projects in 2021, 70% from Europe and 30% from the rest of the world (*Portugal - Market Overview*, 2024). Furthermore, Portugal has increasingly diversified its economy, with a growing emphasis on technology and innovation-driven services (AICEP, 2024). Investments in upskilling the workforce and training incentives for Portuguese talent are being prioritised.

However, Portugal faces ongoing challenges of unemployment and emigration of the young workforce. In 2023, the overall unemployment rate stood at 6.49%, but the youth unemployment rate stood significantly higher at 20.2% (*Portugal - the World Factbook*, 2024). Moreover, many young professionals are leaving Portugal for better working opportunities abroad, with 30% of its people between 15 and 39 residing abroad (*Portugal - United States Department of State*, 2024). Due to low salaries, which have been unable to keep up with the rising cost of living and house prices (*Portugal - United States Department of State*, 2024), and lack of opportunities, the younger generation is deciding to leave the country. This has led to a further ageing demographic and a scarcity of talented and educated workforce, which may negatively impact the economy in the long run. Addressing these issues will ensure long-term economic growth and retain talent in Portugal.

### 7.3 Social

As of 2024, the total population of Portugal was estimated at 10.6 million people (Trading Economics, 2024), with 66.2% of the population living in an urban location and 517,802 living in Lisbon (Worldometer, 2024). The official language of Portugal is Portuguese, with this language present in other countries such as Brazil and Angola, ultimately leading to a high amount of immigration to Portugal from both countries (Kołodziejski, 2019). The birth rate has been declining for many years, resulting in an ageing population and a median age of 46.6 years (Worldometer, 2024).

As mentioned above, Portugal is struggling with a structural skills deficit in the adult population and has a significant portion (40% in 2021) of citizens who have not completed more than lower secondary education. A skill gap is emerging within the population as Lisbon leans towards the technology and innovation sector (European Commission, 2023). Wages and poverty are a concern for many in Portugal, as the minimum wages no longer keep up with rising living costs and rents. Portugal's minimum wage currently stands at approximately 820

euros per month (WageIndicator, 2024), with 22.4% of the country earning this (TPN/Lusa, 2023). However, the average rent for a room is 550 euros per month, a studio over 1000 euros, and an apartment 1800 euros (HousingAnywhere, 2024). Therefore, making it impossible for many to move out of their family home and live independently. Currently, 95% of young people still live at home with their parents and, on average, cannot leave their parent's home until age 30 (TPN/Lusa, 2023). The increase in house and rent prices, as well as the cost of living, could be attributed to the government's schemes and efforts to bring further investment to the country. For example, emphasis on tourism and the golden visa scheme, as well as increased attraction for digital nomads, has led to more housing being converted into holiday lets, higher rent prices due to demand and rising cost of living, driving the Portuguese citizens out of the city and leaving them with the only option to relocate to the outskirts of Lisbon to afford to live.

### 7.4 Technological

Portugal's technological landscape is experiencing a significant transformation, and Lisbon is making a name for itself as the European Silicon Valley (International Trade Administration, 2023). In 2022, Portugal was ranked 15th of 27 EU Member States of the Digital Economy and Society Index (DESI) (International Trade Administration, 2023). Over the past decade, almost 120 foreign companies have established technology hubs in Portugal, contributing to digital exports that reached approximately 3.7 billion euros in 2022 (AICEP & EY Parthenon, 2024).

Portugal's technology and innovation scene has experienced major growth as education, innovation, technological centres, companies, and industry associations have started collaborating (AICEP & EY Parthenon, 2024). For instance, Portugal has many STEM graduates, with around 90,000 engineering students graduating each year (International Trade Administration, 2023), providing a strong talent pool for the tech sector. Universities also play a pivotal role in advancing digital skills through initiatives aligned with the PRR. An example is the UPSKILL programme, which aims to requalify 3000 individuals by 2023 (European Commission, 2023). Along with university collaborations, centres such as the Portugal Digital Academy and Employment+Digital programme have been established to enhance digital literacy (European Commission, 2023). Additionally, companies are collaborating with universities to develop collaborative research and design projects in areas such as car software, smart mobility, and technology (AICEP & EY Parthenon, 2024). Moreover, one of the aims of the Recovery and Resilience Plan (PRR) is to accelerate the digital transition of the Portuguese

economy and society and has been allocated 22% (3.6 billion euros) of the budget for the PRR to transform Portugal's digital adoption (European Commission, 2023). The plan has emphasised enhancing access to technology across sectors such as justice, taxation, culture, and adult education (European Commission, 2023).

Another major driving factor that has led to Portugal's booming digital scene is the presence of the Web Summit. Since 2016, Lisbon has hosted the Web Summit, attracting over 80,000 attendees and gathering policymakers, state heads, CEOs, and founders of unicorns and startups for a conference lasting over a few days (International Trade Administration, 2023). As a result of all stakeholders' efforts, Portugal is a desirable location for many tech and innovation startups. As of 2023, there were over 2,600 startups registered in the country, Lisbon being the 6th most popular startup hub in Europe (AICEP & EY Parthenon, 2024).

### 7.5 Legal

Portugal’s legal, regulatory, and accounting systems follow international norms, ensuring consistency and transparency across all sectors. Proposed regulations are subject to the same consultation periods of 20-30 days, and authorities for rule-making and imposing regulation exist across sectors such as energy, telecoms, financial, and health (United States Department of State, 2024). The Government promotes a favourable ethical climate in Portugal, encouraging companies to adopt voluntary environmental, social, and governance (ESG) practices. Under existing laws, businesses must evaluate the environmental impact of their activities, assess their annual carbon footprint, and establish limits on total greenhouse gas emissions to align with climate goals (United States Department of State, 2024). Moreover, the Portuguese Business Ethics Association (APEE) is dedicated to promoting corporate social responsibility, promoting events that encourage and celebrate protocols and agreements to ensure they are following responsible business conduct principles, which can be found in the labour code (United States Department of State, 2024), hence strengthening ethical standards in the corporate sector. The Portuguese Government also offers a range of investment incentives tailored to the needs of individual investors, considering factors such as industry, project size, and sustainability. These incentives include grants, tax credits, loans, and reduced land costs. As a member of the European Union, Portugal provides investors with access to EU funds, further supporting investments in areas such as renewable energy, urban regeneration, health, and education (United States Department of State, 2024). This combination of ethical

governance, regulatory transparency, and investment incentives makes Portugal an attractive destination for sustainable and responsible business operations.

### 7.6 Environmental

Lisbon (and Portugal) is under an imminent threat of coastal erosion, floods, droughts, forest fires (OECD, 2023), and, more significantly, the chance of another earthquake such as the one in 1755 which destroyed the city of Lisbon. These environmental catastrophes will destroy homes and property, completely altering the country's housing market and socio-economic status, thus impacting this business concept. It is important to consider these factors when deciding where to place and expand the application to reduce the risk of sudden losses and changes in the market due to natural disasters. In a more positive light, Portugal has put efforts into reducing its carbon footprint and turning to natural gas and renewable energy sources to reduce greenhouse gas emissions, promoting and creating a cleaner and safer local environment, which is desirable to many (OECD, 2023).

### 7.7 Evaluations

This PESTLE analysis of Portugal's business environment reveals a country with significant opportunities. Politically, Portugal's stability, alignment with EU directives, and efforts to foster entrepreneurship create a stable foundation for startups. Initiatives such as the Recovery and Resilience Plan (PRR) and Startup and Scaleup Law demonstrate the government's commitment to addressing social challenges, such as the housing affordability crisis, whilst promoting economic growth and recovery. Portugal also offers internationally aligned regulations, incentives for sustainable and ethical business practices, and access to EU funding. Economically, Portugal has shown resilience and growth, as seen through the country's focus on innovation and improving GDP and inflation rates. In recent years, Portugal has established itself as a hub for innovation and digital transformation. The Web Summit, PRR allocations for digital initiatives, and collaborations with universities and industries highlight the country's potential to be a tech leader.

However, Portugal still faces challenges such as unemployment, low wages, and the emigration of talented youth, which creates a barrier to sustained economic progress. In addition, Portugal is facing significant demographic challenges, including an ageing population and high dependency on family structures due to rising house prices and inadequate wages. These factors are ultimately impacting the quality of life for the Portuguese citizens. The

government must take action to help further with these socio-economic challenges and support the citizens in living a good life in their home country. Finally, Portugal is vulnerable to natural disasters such as wildfires, flash floods, and, more seriously, earthquakes. It is important to keep this in mind when determining the locations in which to place this business concept when expanding.

# 8. Competitive Analysis

Analysing the competition is important to identify potential threats, the business environment, and attractiveness. This will help develop a strategy for competitive advantage and differentiation from what is already in the market. To do this, Porter's Five Forces framework will be used, and each force will be categorised with either a low, medium, or high score to determine how attractive the business concept is.

## 8.1 Competitive Rivals MEDIUM - HIGH

The housing market, in general, is very competitive. The online housing market also holds much competition due to the many existing platforms and avenues one can use to secure a room, apartment, or home. There are both direct and indirect rivals (substitutes), making the competition relatively high. Student housing platforms already exist. However, students feel that these platforms are exploitative. Therefore, there is a gap in the market for student housing platforms that put the student first - with a fair price, low booking fees, and ultimately, transparency and reliability to feel safe and secure when booking a room or finding a roommate. This industry will continue to grow as international mobility becomes more frequent and the number of students globally continues to increase. Housing is an essential need for all; therefore, there will always be a demand for such services. The AI industry is rapidly developing and is marked by high competition. It is important to move quickly with digital discoveries and trends to maintain relevance.

## 8.2 Potential for New Entrants MEDIUM - HIGH

Entering the online housing market platform business requires an initial investment in app development, marketing, and building the user base. The capital requirements for such a business may deter new entrants. Additionally, brand identity and trust play an important role in the success of such a business, as making decisions on housing is significant. Customers want to know they can trust the platform they are doing business with to give them a legitimate, safe, and secure housing experience. Moreover, platforms such as Uniplaces hold many housing listings, which are solely advertised using Uniplaces. Therefore, new entrants must find a way to access different housing sources to avoid conflicts. Housing and online platform regulations are also important to consider when starting such a business, which, again, depending on local and international laws, may deter new entrants.

### 8.3 Supplier Power MEDIUM

Suppliers in this business case refer to the software developers, data storage providers, and other tech service vendors required to build and run an application. An abundant number of such suppliers are available for the job. Since there are many professionals readily available, the ability to switch or negotiate pricing is possible. However, it is also possible for suppliers to move into the buyer's industry, creating their own applications and being able to differentiate technically. These professionals are also crucial for the technology industry, and therefore, buyers need the suppliers and vice versa so that both parties can succeed.

### 8.4 Customer Power MEDIUM - HIGH

The number of customers in the housing market depends on many factors. However, the target audience of students and young people hold moderate power as this target group is typically price-sensitive and searches for free or low-cost services. Therefore, brands must keep their prices low to attract these cost-conscious customers. In addition, customers have low switching costs as they can easily move to competitors' websites and apps if they find a better price, listing, or feature. In addition, students are usually informed about ways to find housing through digital networks such as Facebook groups and Instagram posts. Therefore, finding ways to differentiate and become the most suitable platform for students trying to find housing and roommates is important.

### 8.5 Threat of Substitutes MEDIUM

As mentioned previously, there are many substitutions for housing apps and avenues to explore for students to find housing. In this case, direct and indirect substitutes exist. Direct substitutes include all existing student housing apps such as Uniplaces, Inlife, and HousingAnywhere. Indirect substitutes such as social media platforms, university housing boards, or personal networks also exist. Continuous innovation and differentiation are important to compete against the substitutes. It is also important to provide a pricing model that is attractive to a cost-conscious target audience and differentiates oneself from the substitutes. The threat is high as customers will be willing to go elsewhere for a more suitable housing market experience. Buyers may also perceive all online housing platforms as the same - high booking fees, lack of transparency, high risk of scams, and rooms that are unrepresentative of the online posting.

Therefore, finding housing through alternative routes avoids all and any housing platform applications and websites.

### 8.6 Conclusion

Overall, the housing platform market is highly competitive, with numerous platforms offering similar services and therefore acting as rivals and substitutions to Hospi. The costs to start such a platform and succeed, as well as efforts to build brand trust, are relatively high. However, there are many technology providers and engineers and therefore supplier power is lower. It is important to innovate, focus on affordability and build the desired image and trust with the student target market to reach success in this venture.

# 9. Competitors

## Direct Rivals

| Company | Description | Service Offered | Target Market | Prices & Fees (Lisbon) |
|---|---|---|---|---|
| **Uniplaces** | Online platform connecting students, interns & young professionals to verified landlords for mid-long term accommodation across European cities. 150,000 homes and rooms listed | Property listings, booking process, customer support, online payment portal. | Primarily targets international and domestic students and young professionals | Rooms ranging from €250 - 1350, services fees of up to 100% months rent. |
| **HousingAnywhere** | Online platform connecting students, interns & young professionals to verified landlords for mid-long term accommodation across European cities. 160,000 homes and rooms listed | Property listings, booking process, customer support, online payment portal. | Primarily targets international and domestic students and young professionals | Rooms ranging from €220 - 824 + one time tenant protection fee. |
| **InLife Housing** | Online platform connecting students, interns & young professionals to verified landlords for mid-long term accommodation across European cities. 20,000 accommodations listed | Property listings, booking process, customer support, online payment portal. | Primarily targets international and domestic students and young professionals | Rooms ranging from €300 - 1093 per month, booking fee corresponding to a percentage of the monthly rent of the room. |
| **Erasmus Life Housing** | Online platform connecting students, interns & young professionals to verified landlords for mid-long term accommodation across European cities. | Property listings, booking process, customer support, online payment portal. | Targets Erasmus, international students, for a housing duration period of five months | Rooms ranging from €340 - 1200 per month, booking fee corresponding to a percentage of the monthly rent of the room (50 euros or more at least) |
| **Student Room Flat** | Online platform connecting students, interns & young professionals to verified landlords for mid-long term accommodation across European cities. | Property listings, booking process, customer support, online payment portal. | Primarily targets international and domestic students and young professionals | Rooms ranging from €340 - 1025 per month, additional admin and membership fees |

| | | | | |
|---|---|---|---|---|
| | 8000 room listings on the platform. | | | |
| **SpotAHome** | Online platform connecting students, interns & young professionals to verified landlords for mid-long term accommodation across European cities. 180,000 listings on the platform | Property listings, booking process, customer support, online payment portal. | Primarily targets international and domestic students and young professionals | Rooms ranging from €250 - 1800, services fees of up to 100% months rent. |
| **Habyt** | Online platform connecting students, interns & young professionals to verified landlords for mid-long term accommodation across European cities. Over 30,000 listings | Property listings, booking process, customer support, online payment portal. | Primarily targets international and domestic students and young professionals | Rooms ranging from €512 - 808, additional service fees |
| **Student.com** | Online platform connecting students, interns & young professionals to verified landlords for mid-long term accommodation across European cities. Over 2 million beds across 400 cities worldwide and partnering with over 1000 universities | Property listings, booking process, customer support, online payment portal. | Primarily targets international students | Rooms ranging from €305 - 1350, additional service fees |
| **UHomes** | Online platform connecting students, interns & young professionals to verified landlords for mid-long term accommodation across European cities. Over 2 million beds across 500 cities worldwide and partnering | Property listings, booking process, customer support, online payment portal. | Primarily targets international students | Rooms starting from approximately €500 per month, additional service fees |

| | | | | |
|---|---|---|---|---|
| | with over 2000 universities | | | |
| **HouzeStudent** | Online platform connecting students, interns & young professionals to verified landlords for mid-long term accommodation across Lisbon. | Property listings, booking process, customer support, online payment portal. | Primarily targets international and domestic students | Rooms ranging from approximately €400 - 800 per month, additional service fees |
| **Erasmusu (powered by SpotAHome)** | Online platform connecting students and young professionals to rooms or roommates for mid-long term accommodation across European cities. 100,000 listings worldwide, 1 million + international students experience with Erasmusu. | Property listings, booking process, customer support, online payment portal. | Primarily targets international and domestic students | Rooms ranging from €250 - 1900, services fees of up to 100% months rent. |

*Table 1. Direct Rivals. Source: Author*

### Indirect Rivals (Substitutes)

| Company | Description | Service Offered | Target Market | Prices & Fees (Lisbon) |
|---|---|---|---|---|
| **Nido Living** | Premium student and co-living accommodation provider across UK, Ireland, Portugal and Germany. Est. 2007, managing over 18,000 beds. | Accommodation options, facilities and community and social experiences | Primarily targets international students and young professionals seeking a community oriented, comfortable living environment | Prices range from approximately €450 - 800 for a room. |

| | | | | |
|---|---|---|---|---|
| **Livensa Living** | Premium student and co-living accommodation provider in Spain and Portugal | Accommodation options, facilities and community life programme | Primarily serves students seeking comfortable and well - equipped accommodation in Spain and Portugal | Prices start from approximately €700. |
| **Xior** | Specialises in student accommodations across Europe with significant presence in Belgium, the Netherlands, Spain and Portugal. Holds over 26,000 units across 42 cities. | Accommodation options, facilities and community living experiences | Primarily serves students seeking comfortable and well - equipped accommodation. | Prices start from approximately €555 - 800 depending on the type of room chosen. |
| **Idealista** | The leading online real estate marketplace operating in Spain, Italy and Portugal. Founded in 2000, provides a platform for buying, selling and renting properties. Supports approximately 40,000 real estate agents and attracts 38 million visitors to its site. | Property listings, user friendly platform, market insights (data and analytics) | Serves individuals and real estate professionals in southern europe, including property buyers and sellers, landlords and those looking to rent. | Rooms range from €150 - 1350 per month. Listing fees apply to those who advertise a property on the site. |
| **Estate Agents** | Businesses or individuals specialised in buying, selling or renting properties. Acting as intermediaries between property owners and renters or buyers. | Property listings, tenant search and matching, negotiation and legal support, property viewings, market insights | Students, young professionals, families and expats. Anyone who is looking to buy, rent or sell property. | Rental prices, estate agent fees and additional fees such as administration fees vary per business, location and market. |
| **Airbnb** | A global online marketplace connecting individuals seeking short-term accommodations with various lodging options including private rooms, entire | Accommodation listings, holiday/ travel experiences, messaging platform, online payment transfers. | Primarily for travelers, holidaymakers and property hosts. | Rental prices vary depending on location and property type. Airbnb charges a host and guest fee, within the booking payment. Additional costs may include cleaning, extra guests or other specified |

| | | | | |
|---|---|---|---|---|
| | homes or unique property experiences. Founded in 2008 and has since expanded over 220 countries and regions offering millions of listings worldwide. | | | services within the listing. |
| **Social Media** | Online tools facilitating communication, networking and content sharing. Platforms such as Facebook & Instagram are used by landlords, real estate agents and students to share listings, connect and market properties | Property listings and advertisements, community groups and networking, direct messaging and communication channels. | Social media applications are targeted towards all individuals | Rooms vary depending on location and demand. Applications are free and therefore avoid booking fees and service charges. |
| **University Sites & Housing** | Provide accommodation directly or partner with housing agencies to provide student housing options. | Universities may provide on - campus housing, off - campus housing listings and partnerships, information on application process and deadline, student housing services and support and housing financial aid on occasions, | All kinds of students in search of housing close or on the university campus | Room prices vary depending on availability and demand of university housing options. University of Lisbon and Nova SBE provide accommodation options for incoming students. |

*Table 2. Indirect Rivals. Source: Author*

To conclude on the competition amongst online housing platforms, student.com and UHomes, as well as Uniplaces, SpotAHome and HousingAnywhere all have a strong presence within the industry. Students have a range of options on these sites and the platforms clearly perform well, with the number of users and bedrooms available as evidence of this. Prices of rooms and extra service fees somewhat vary in the Lisbon region, however on average are mostly of a similar range.

# 10. Internal Analysis

For the purposes of developing the most effective strategy for this business plan, a SWOT analysis will be used to detect and evaluate the business's internal and external weaknesses, strengths and opportunities. To understand how this business plan could develop and how external factors may impact the success of the initiative.

## 10.1 SWOT Analysis

| Strengths (Internal) | Weaknesses (Internal) |
|---|---|
| ● Innovative Approach: Swiping feature introduces an engaging and user-friendly way of matching roommates and room options.<br>● Targeted Market: A prime target market - students who are struggling with housing issues but are also a very tech savvy generation.<br>● Convenience & Personalisation: Filters enable a quick & streamlined process compared to traditional housing platforms or house searching methods. As well as ability to easily input budget, location, lifestyle etc.<br>● Scalability: Potential to expand the application further than Lisbon, possibly even globally - especially in cities of housing crises.<br>● Community: Opportunity to build a sense of trust and community through user reviews, profiles and identity verification features.<br>● Lower Entry Barriers: Compared to a physical estate agency, operating as an application reduces costs and simplifies scalability. | ● Limited Initial Reach: Establishing a large user base when beginning an app is very challenging<br>● Lack of Trust: Users may hesitate to use an app for housing as they are concerned about safety or scams, especially when the app is new and does not have any form of reviews or reputation.<br>● High Development Costs: Designing, maintaining and innovating a secure and high performing app would require significant investment.<br>● High Competition: Established applications and platforms in the housing/roommate matching sector may already have loyal customers.<br>● Seasonal Demand: Since the target market is students, semester beginnings/ ends cause fluctuation in demand for housing.<br>● Technology dependence: The success of the app depends on a consistent performance and updates as technical glitches may harm reputation. |

| **Opportunities (External)** | **Threats (External)** |
|---|---|
| ● Growing Housing Crisis: Rising rent prices and housing shortages make it that more homes become multiple occupancy, hence the need for this app.<br>● Collaborations: As this app is student focused, partnerships with universities, student unions or student festivals allows for promotion of the app and may help to enhance credibility.<br>● Monetisation Avenues: Introducing new/premium features may give the opportunities for further monetisation of the app.<br>● Sustainability: Promoting shared living as an eco-friendly housing solution will appeal to environmentally conscious users<br>● Market expansion: Potential to make app adaptation to fit with industry trends/other demographics | ● Competition: High level of competition from both direct rivals and substitutes<br>● Regulatory Hurdles: Local housing laws or privacy regulations may complicate operations in certain regions<br>● Economic Factors: Recessions or changes in housing markets could impact demand for shared housing.<br>● Negative Publicity: Incidents like fraud, scams or unsafe matches could damage the app's reputation very easily.<br>● User Retention: Once users find housing or roommates, they may not return, making it challenging to maintain an active user base.<br>● Technological Risks: Data breaches, server failures or app bugs could lead to user dissatisfaction and legal issues<br>● Cultural/Social barriers: User preferences for housing or shared living may differ significantly across regions and countries.<br>● Landlord Interference/Unacceptance: Landlords may not accept this process, or even try to use the application themselves to have access to a more affordable advertising avenue. |

*Table 3. SWOT Analysis. Source: Author*

### 10.2 VRIO Analysis

To assess the potential for long-term success, this section applies the VRIO framework to evaluate whether Hospi possesses the necessary resources and capabilities to achieve a sustained competitive advantage.

| Resource/Capability | Valuable | Rare | Inimitable | Organised (to exploit) | Competitive Implication |
|---|---|---|---|---|---|
| Swipe-based, gamified matching system | ✓ | ✓ | ✓ | ✓ | Potential Sustainable Advantage |
| User-first design with low entry fees & transparent listings | ✓ | ✓ | **X** | ✓ | Temporary Advantage |
| Focus on verified listings & safety assurance | ✓ | **X** | **X** | ✓ | Competitive Parity |
| Niche market: Students | ✓ | ✓ | **X** | ✓ | Temporary Advantage |
| Lisbon-focused launch & expansion plan | ✓ | **X** | **X** | ✓ | Competitive Parity |
| Community-building emphasis | ✓ | ✓ | ✓ | **X** | Unused Competitive Advantage |
| Scalable platform model | ✓ | **X** | **X** | ✓ | Competitive Parity |
| University partnership potential | ✓ | ✓ | ✓ | **X** | Unused Competitive Advantage |

*Table 4. VRIO Analysis. Source: Author*

This VRIO analysis indicates that Hospi has strong potential, but its long-term success will depend on how effectively its unique features are supported through organisation and execution. Although the business is currently in the pre-seed phase, this analysis assumes the company is fully operational, offering a realistic perspective on how its resources could perform in practice. The app's user-friendly design, low entry fees and verified listings address students' needs. However, these features are relatively easy for competitors to replicate which offers only short-term advantages or, at best, competitive parity. Similarly, the apps focus on a

niche demographic of students helps it stand out in a market which is often broad and impersonal. Yet, because this focus can be easily imitated, it represents a temporary competitive advantage.

More promising are resources such as the community-building emphasis and potential partnerships with universities. These are valuable, rare and difficult to imitate, yet remain underutilised as the business is not yet organised to fully leverage them. With strategic development they can evolve into powerful sources of competitive strength which will position the app for long term growth.

One of the app's greatest strengths is the swipe-based, gamified matching function. This feature is not only highly valuable and rare but also difficult for competitors to replicate. Therefore serving as a strong foundation for building sustained competitive advantage.

Overall, whilst Hospi's concept is built on several promising resources, its ability to turn these into lasting competitive advantages will rely heavily on its execution, stakeholder relationships, and ability to develop an effective organisational structure.

# 11. Business Plan Objectives

Objectives in a business plan are crucial to provide clarity, focus, mission and direction for the business. It is important to take these intangible objectives and transform them into practical actions. This can be done by translating the objectives into SMART goals, an acronym and theory by Doran in 1981 (Bjerke & Renger, 2017). Doran introduced the specific, measurable, assignable, realistic and time-related (SMART) criteria so that business objectives could be monitored for progress towards their desired outcome. Therefore, the objectives of this business plan are as follows:

First year goals:

- Build and launch the app in Lisbon with core features of swiping functionality, filters, user profiles and matching algorithms within the first 6 months
- Achieve 7350 active users within the first year (5% total addressable market)
- Reach up to 100 ‘success stories’ within the first year (satisfied and successful app users)
- Establish at minimum five partnerships and connections with local universities and student organisations in Lisbon
- Conduct a localised marketing campaign to promote the app

Second year and beyond:

- Introduce premium features such as boosted visibility/ verifying profiles/ advertisement removal
- Focus on converting free users to premium users
- Launch the app in at least three new student cities every other year, starting in the third year of business, beginning expansion from Lisbon to Porto, Madrid and Barcelona.
- Partner with at least five universities in each city the app is available in.
- Become the number one housing application option for students
- Reach five stars in the app store

## 12. Development Strategy

One can use Porter's generic business strategies to obtain a competitive advantage over rivals and substitutes within this industry and develop a strategy that leads to success. This theory states that a firm can achieve a higher rate of profit over a rival in one of two ways (or sources). This could be by having a cost advantage, whereby a product is similar to others but has a lower cost. Alternatively, competitive advantage can also come from differentiation, whereby a product is unique, unlike anything already offered on the market (Grant, 2021). These two variables can be broken down even further based on the scope of the market. Firms can achieve both differentiation and cost advantage, this is known as best - cost strategy (Grant, 2021).

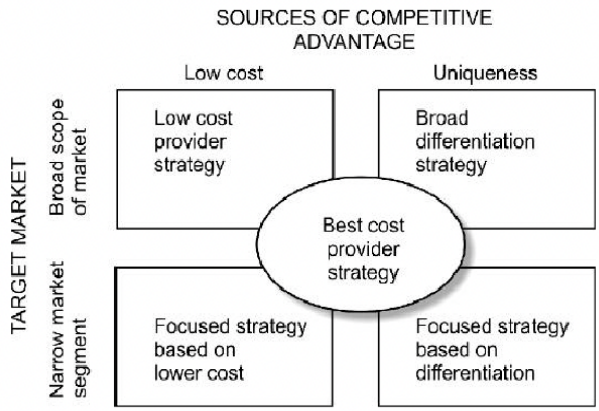



Figure 7. *Porter's Generic Competitive Strategies and its influence on the Competitive Advantage. Source:* Ali & Anwar (2021)

This business plan emphasises the need to be different and exclusive amongst all other housing platforms to target the needs of students and students only. Therefore, it would be relevant to follow the differentiation focus strategy. Although the housing market industry is significant, this plan focuses solely on the student housing market niche, concentrating on housing for students and helping students find suitable housemates. Having an exclusive platform only for the target market students would be desirable to the students, promoting trust, security, and comfort because the student's needs and wants are put first. Additionally, introducing new innovative features will differentiate the product/service further. On top of this, focusing on providing a pricing strategy lower than competitors, because students come first, will provide a differentiative aspect to the plan. These points allow for competitive scope

whilst also creating value for the specific target market and delivering a quality service to the students.

### 12.1 Unique Value Proposition

This application holds unique value by simplifying the accommodation search for students looking for a room or roommate. The application offers a smooth, gamified experience for roommate matching, ensuring compatibility and reducing uncertainties about living arrangements. Swiping features (swipe-to-match) and extensive filters for price, location, and lifestyle preferences will be available. This concept ensures transparency and trustworthiness in listings by offering detailed descriptions of the room and housemates, as well as accurate photos and verification of profiles. In-app communications will be available before booking. This concept recognises the importance of the student community, putting students first with the features offered and offering an affordable, realistic price for the services.

### 12.2 Vision & Mission

The vision of this concept is to be the leading comfortable, affordable, safe, and effective (student-first) application for students to find housing and roommates in one place. Minimise the disappointment of students seeking accommodation in their home cities or abroad by providing such a solution. The mission is to assist students seeking co-living arrangements in finding a place to live and being introduced to roommates before agreements and arrivals. It also allows the existing roommates to find a suitable match for their vacancy and take complete control of their living situation and environment.

# 13. Implementation Policies

## 13.1 Branding

The brand is important as it represents a business's identity, values, reputation, and perception. It considers all tangible elements, such as logo and design, as well as intangible elements, such as the customers' experiences and emotions tied to the product or service. Since branding is an important aspect of business and value creation, a logo, brand name and tagline have been created. The name 'Hospi' is the shortening of the Dutch word 'hospiteeravond,' which means 'hospitality evening.' Students in the Netherlands in search of a room will go to an evening, invited by the housemates, to pitch themselves for a vacant room within the house. Due to the severe housing crisis in the Netherlands, this is an issue for many. These evenings only allow Dutch students, and most of the time, are entirely 'overbooked', leaving many students with great disappointment and feelings of rejection when they do not get accepted for the room. This name was chosen for a few reasons: the concept of the evening is sound, it allows students to meet each other and see if they are a good roommate fit, and the potential housemate likes the room. In some ways, it is a real-life version of this business concept. However, the word 'hospitality' refers to the act of welcoming, which is not as it seems to be when these evenings are discriminatory and exclusive. The app 'Hospi' plays on this word and concept; however, it values hospitality and promotes the inclusion of all students on the app.

In addition, the tagline *"Harmonious Living. For students, by students"* reflects Hospi's vision to make finding compatible roommates and rooms easy, safe and affordable - building a trusted community where students can have a positive accommodation experience and demonstrating that the company prioritises the students' best interest.

Hospi

Harmonious Living.
For students, by students

### 13.2 Core Values

- *Trust and Safety*: Prioritise creating a secure environment for consumers by verifying profiles, ensuring safe interactions and protecting user data. We aim to build confidence amongst users through ensuring transparency and reliability in listings and matches
- *Community and Connection*: Provide a sense of belonging by connecting like-minded individuals in their room/roommate search.
- *Inclusivity:* Promote inclusivity through brand identity and actively on the platform
- *Accessibility, Affordability and Simplicity*: Make the process of room/roommate hunting easy, fast and user-friendly with intuitive swiping (swipe-to-match) and filtering features. Ensure the platform is accessible to all students by obtaining low fees.
- *Sustainability:* Promote shared living to reduce housing shortages and encourage sharing resources.

### 13.3 Segmentation, Targeting & Positioning

The STP model is a strategic marketing framework that helps businesses identify, narrow down and define the target and market and will aid in further defining the objectives of this business concepts marketing strategy.

**A. Segmentation (B2C)**

- *Demographics*: Males and females aged between 18 - 30, currently enrolled in a higher education study.
- *Geographics:* Globally located, coming to attend university in a region which the app applies to.
- *Functional Needs*: Able and willing to pay a price to find accommodation or find their future roommate whenever they need housing or filling a vacancy within their shared household. Those with a room to offer are able to promote the empty space and make decisions about who fills the room, with prior agreement with the landlord.
- *Self- identity/image*: Students who are tech-savvy, look for simple easy processes, care greatly/ have appreciation for their home and home environment as well as who they will share their home with. Desire to have a home which is harmonious and be informed about who they will live with before entering. Honest and inclusive personality to contribute and be a receiver of a good experience on the application.

- *Product behaviour:* User of applications and online platforms for needs such as housing, not apprehensive about using applications for such a purchase.

### B. Targeting

Selecting the market segments that the concept will focus on to dedicate a specific marketing strategy, understanding who will contribute to the business's profitability, and ultimately determining the size of the target market is necessary. The targeting of this business concept is towards (but not exclusive to) international and exchange students who do not have the connections or networks within the country of study to find accommodation without having to use an estate agent, a housing platform, or social media outreach. Additionally, international students may be more willing to pay more for a room to ensure their purchases are not fraudulent or untrustworthy/unreliable.

The total addressable market size has been calculated below using Savills Student Market Report 2023 (Savills, 2023):

Total number of students in Portugal as of 2023: approximately 147,000

Total number of international and exchange students in Portugal 2023: 78,000

Therefore, with a focus on international and exchange students, however not exclusive to them, the total addressable market in Portugal is between 78,000 and 147,000 students.

### C. Positioning

To appeal to the target market and convey the desired offer and image to customers' minds regarding the service/product, one must carefully determine the positioning. Components for this include identification of the service/product and differentiation from competitors.

- Identification: a mobile application for students to find a suitable, safe and comfortable room or search for compatible roommates, at an accessible price, with students' needs put first.
- Differentiation: a student-first application designed solely to benefit themselves, resulting in informed room and housemate decisions at an affordable cost. Formatted in a gamified manner/interface to make the process of finding housing quicker, less daunting, and, in some way, even fun.

Relating to the previous analysis of the competition and competitors, it is possible to draw a perceptual map to see where this business concept stands. The two variables within this map are Price vs Service/Quality. The competitors presented in this map are those taken from the conclusions of the competitor analysis (most popular/ biggest platforms), as well as popular substitutions such as social media and estate agents.

Price = the cost of the booking fee/ + monthly subscription fee
Service/ Quality = Based on individual perspective as well as online TrustPilot reviews considered
Hospi aims to be the lowest in price but of excellent service and quality.

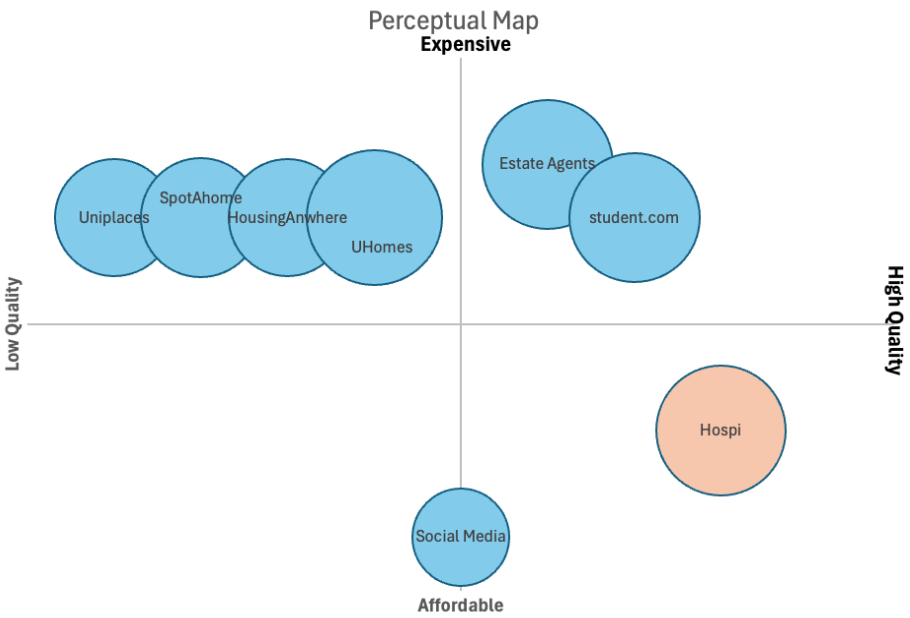



Figure 8. *Perceptual Map of Existing Competition Source: Author*

### 13.4 Marketing Mix

A marketing mix includes different focal areas to create a comprehensive marketing plan. To complete this, the framework of the 4P's, introduced in the 1960's by E. Jerome McCarthy will be used. The 4 P's stand for Product, Pricing, Promotion and Place (or Distribution). These variables can support in meeting customer needs, differentiating the business from competitors and ultimately achieving success.

### A. Product

Hospi is a differentiating B2C service and communication platform exclusively for students searching for housing or compatible roommates. This service will function within a mobile application and will bring value through the student-focused drive of the app: exclusive for students, students acting as the housing or roommate supplier, as well as the customer, and vice versa. In addition, being at an affordable, realistic price for students who are always looking for the best deals. All features of the application will contribute to serving the students on both sides of this two-sided network. On one side, the student, with prior arrangements and agreement with the landlord, will be able to create a room posting, along with information on location, price, home features, roommates currently living in the home, and any indications of the kind of roommate they are in search of. On the other side, users will be able to create profiles to promote themselves as potential roommates for those rooms with vacancies. Profile making includes uploading photos and creating descriptions for themselves, as well as inputting data into their profile to achieve algorithm matching. Both sides will help each other in fulfilling their needs and ultimately will be presented on a swiping interface (swipe-to-match) to make decisions quickly and keep the search for housing or roommates as least daunting as possible, as well as a pleasant and even 'fun' experience. Both sides of the platform will have a shared communications tool to communicate in-app with potential users (rooms or housemates). Finalising room contracts and formalities will be handled off-app, between the two parties and respective landlord/individuals necessary. In time, Hospi features and premiums will expand, allowing for further monetisation of the application and potentially a more attractive app to those who desire an even more thorough roommate or housing search.

### B. Price

Hospi is a service focused on the needs and wants of students and, therefore, aims to achieve this service at an affordable price whilst still generating profit. Initially, a penetration pricing strategy will be implemented, and therefore, Hospi will be a free application. This allows students the opportunity to experience the value that Hospi has to offer and generate a database for the application and matching algorithm to start running on.

Once the platform's database is sufficient and has given an opportunity for students to discover the value, Hospi will require an installation fee when downloading from the app store,

as well as premium services and, therefore, membership fees. This will include features such as profile boosts, extensive filters, and the removal of advertisements. Hospi's pricing strategy will be a hybrid model combining a base fixed fee with optional add-on fees for additional features or services. Competitors' package deals were considered to determine these prices (see annex). In addition, Hospi will provide an advertisement service to external companies wanting to target students with their products and services to receive additional revenue for the business.

Pricing model:

| Component | Service offered | Price |
|---|---|---|
| One-time flat rate installation fee & Basic package (1 month access) | Access to application<br>Basic profile set up, a handful of filters, access to uploading photos, limited swipes, in-app messaging | €5.99 |
| Silver package (1 month access) | Profile set up, advanced number of filters, access to upload photos and videos, in-app messaging, limited swipes, removal of advertisements | €9.99 |
| Gold package (1 month access) | Extensive profile set up with maximum number of filters, profile boosts, access to upload photos and videos, unlimited swipes as well as in-app messaging and video calls and removal of advertisements | €16.99 |

*Table 5. Pricing Model. Source: Author*

### C. Promotion

A communication strategy and promotion of the service are important factors in reaching success. The promotion of Hospi must be clear and concise and ultimately designed to attract the student target market. The following communication objectives, activities, and channels include:

Communication Objectives:

- Create brand awareness amongst students about the existence of the app and its unique features
- Highlight the value proposition of the app
- Clearly communicate the differentiation of the app
- Build brand trust and credibility
- Motivate students to download and register on the app
- Leverage word-of-mouth by encouraging users to share their experience and set up a referral programme
- Demonstrate ease of use of the app
- Address pain points and ultimately the understanding of the origins of this concept
- Promote the app through partnerships
- Be the preferable choice for a housing platform/roommate search

Communication activities:

These activities will aid Hospi in fulfilling the previous communication objectives.

- Engage in SEO, social media profiles, and campaigns.
- Collaborate with partners such as universities and student festivals/associations through email marketing, open days, and introduction days.
- Encouragement of testimonials, success stories, and reviews on the app store and social media platforms
- Create referral programmes for lead generation and benefits/incentives for users.

Communication Channels:

- Website to promote the brand, share additional information, and ultimately act as a distribution channel by sharing the links to the application
- Social Media Profiles/Marketing, setting up own social media profiles to gain a following and build brand identity
- University websites, events, collaborations, email marketing
- Student association events, collaborations, email marketing
- Promotions and campaigns in-app

### D. Place (Distribution)

The distribution strategy for the app focuses on maximising accessibility and convenience for the target market - students actively seeking rooms and housemates. As a digital platform, the

app will be distributed through online channels, ensuring its availability for download on major distribution platforms, including the Apple App Store (iOS devices) and the Google Play Store (Android devices). A website will also serve as an additional distribution channel, offering accessible links to download the app on the phone as well as information about the app, backstory, and brand. Additionally, the app will be promoted and distributed across university partnerships, on websites/student portals, and directly promoted during university events.

# 14. Legal Framework

## 14.1 Business Structure and Registration

Hospi will be registered as a Single Member Limited Liability Company (LLC) where one individual or entity owns all shares. This registration is permitted by Portuguese Law and is a popular structure in Portugal, especially for small and medium-sized enterprises (SMEs). Registering as an LLC allows for the flexible option of total control by one individual (*Limited Liability Company in Portugal | LTA*, 2024) and provides limited liability, ensuring that the owners personal assets are protected. It is also suitable for small investors due to low share capital requirements of one euro (Castro, 2022). In Portugal, an LLC can be established in three ways: Immediate Formation (same day), Online Formation or Traditional Formation which requires a company agreement or contract outlining rules and operations which must be registered with the commercial registry.

## 14.2 Organisational Structure

As Hospi is a startup with limited budget and therefore current limited ability to extend and develop the team greatly, this organisation will initially adopt a flat organisational structure. This structure allows for role fluidity, quick decision making and a close-knit environment of high involvement for all employees. In addition, the nature of this structure limits hierarchy and shortens the chain for reporting. These aspects help foster a successful startup environment. As the business develops, the organisational structure may change when and if necessary, to allow growth and success externally and for the internal business environment (Miro,n.d.) Within this structure, employees will be tasked with different business functions depending on abilities.

## 14.3 Organisational Chart & Functional Descriptions

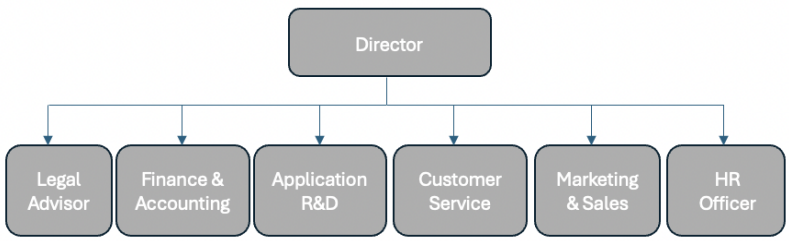



Figure 9. *Organisational Chart and Function Descriptions. Source:* Author

Function Descriptions:

- Director: Oversees overall vision, strategy and operations of the business. Focuses on growth, compliance and alignment with company objectives.
- Legal Advisor: Ensures business and application complies with protection and consumer laws, drafts legal documents and mitigates legal risks.
- Finance & Accounting: Manages budgets, financial reporting and transactions ensuring the app is financially stable and complies with accounting and financial regulations.
- Research & Development: Enhances the apps functionality through innovation, data analysis and user feedback to improve user experience and technical performance. Responsible for software engineering and overall design of application.
- Customer Service: Provides user support, resolves issues, ensures a smooth experience by handling inquiries, complaints and technical assistance.
- Marketing & Sales: Develops and executes marketing strategies to attract users, manage partnerships and ultimately drive app downloads and revenue for the company. The number of employees fulfilling this position will increase accordingly with regional expansion of the application (two more regional positions when expansion to Spain is launched, another two when expansion to the Netherlands occurs)
- HR Officer: Handles recruitment, employee relations and compliance with labour laws ensuring a positive, productive and inclusive working environment.

Remuneration Policy:

Fixed salaries for functions (years 1-3), based on the average salary of Portugal (2023) of approximately €23,000 a year, €1916 per month (Expatica, 2025) and considering this is a startup with limited cash flow. Business functions will be divided amongst the start-up team, to keep costs down at this stage.

| | | |
|---|---|---|
| Director/Marketing & Sales | 40 hours/week | €2000 |
| Legal Advisor | 20 hours/week | €1000 |
| Finance & Accounting | 40 hours/week | €2000 |
| Research & Development | 40 hours/week | €2000 |
| Customer Service/HR Officer | 40 hours/week | €2000 |

*Table 6. Remuneration Policy. Source: Author*

### 14.4 Regulatory Compliance: Data Protection & Privacy Laws

As Portugal is a member of the European Union, the country follows The General Data Protection Regulation (GDPR) which is the strongest privacy and security law worldwide (European Council, 2024) Law no 58/2019 of 8 August ensures the execution of GDPR within the country of Portugal (DLA Piper, 2024). Hospi will comply with such regulations to ensure the protection and safety of customer data protection and privacy. The app will ensure clear consent of personal data usage, as well as the right to object, rectify or erase personal data from the platform. This data will not be shared with third parties outside of the Hospi application but will be processed and securely stored in compliance with GDPR laws.

Hospi will further comply with the Digital Services Act (DSA), another EU law which regulates intermediaries and platforms to prevent illegal and harmful activities online, the spread of misinformation, ensuring a safer and accountable online environment (European Commission, 2023). The DSA protects consumers and their fundamental rights online by setting clear rules. It allows for growth of smaller platforms and start-ups like that of Hospi.

### 14.5 User Agreement & Terms of Service

- Hospi is an online marketplace and does not rent or let accommodation to users directly. Hospi serves as an intermediary and does not take any responsibility for the contracts and agreements made between the two parties nor can guarantee the accuracy of listings, successful matches or behaviours of users.
- The responsibility of profile accuracy, information and respectful behaviour falls onto the users of Hospi.

- It is prohibited to discriminate, harass, commit fraud or any illegal activity on the Hospi application. Hospi reserves the right to suspend or terminate accounts violating these terms.
- Users can report issues through the applications support system and are encouraged to do so before escalating disputes. Disputes shall be dealt with by the laws of jurisdiction where the company is registered (Portugal).
- Users will be notified of significant changes to the application and terms of service and must accept these changes to continue using the service.
- Hospi owns the application and its content including trademarks, logos, taglines and proprietary software.

### 14.6 Protecting Intellectual Property

Protecting Hospi's intellectual property is crucial for long-term success and competitive advantage. Following Schilling's (2017) approach to technological innovation strategy, the business will take steps to secure the brand, technology and content.

Firstly, the Hospi name, logo and tagline as EU trademarks via the European Union Intellectual Property Office (EUIPO), ensuring protection across Portugal and the wider EU. The app code, design and written content are automatically protected under EU copyright law (Código do Direito de Autor e dos Direitos Conexos).

The logic behind the matching algorithm, which is a core part of the user experience, will be treated as a trade secret and safeguarded by confidentiality agreements and internal controls. This is in line with the EU Trade Secrets Directive (Directive (EU) 2016/943) (Gov.uk, 2016).

By protecting assets, the business aims to preserve Hospi's unique value, whilst remaining agile and ready to grow, an approach Schilling (2017) highlights as a key factor to sustainable innovation.

| Asset | Protection Method |
|---|---|
| Hospi name, logo, and tagline | Registered as EU trademarks via the European Union Intellectual Property Office (EUIPO) |
| App code, UI/UX design, and written content | Automatically protected under EU and Portuguese copyright law |
| Matching algorithm logic | Treated as a trade secret and protected through confidentiality agreements and internal controls |

*Table 7. Protecting Intellectual Property. Source: Author*

# 15. Implementation Requirements

To take this project from paper to reality, there are activities set to make this happen. Within this section, a time frame for each activity is set, to forecast the progression and development of the business. These requirements will begin after submission of the business plan, in the summer of 2025. The total development time is 12 months, from July 2025 to July 2026. After launch, the focus will shift to growth, user retention, brand building and scaling activities.

| Task | Start Date | Estimated Duration (days) | Key Milestones |
|---|---|---|---|
| Further Market Research & Validation | 01/07/2025 | 60 | Further surveys, competitor analysis and defining university collaboration targets |
| Business & Legal Setup | 01/07/2025 | 45 | Company registration, terms of service & legal compliance |
| MVP Planning & Wireframing | 01/09/2025 | 30 | Finalizing core app features, drafting UI/UX designs |
| Backend & Database Development | 01/10/2025 | 90 | Database building, matching algorithms, user authentications |
| Frontend Development (Mobile App) | 01/11/2025 | 90 | Profile creation, swiping function, chat system |
| Security & Compliance Implementation | 01/01/2026 | 45 | GDPR & DLA compliance |
| Beta Testing & Feedback Collection | 15/02/2026 | 45 | Invite exclusive, early users, fix bugs & improve performance |
| Pre-Launch Marketing & Growth Strategy | 01/04/2026 | 60 | Social media campaigns, university partnerships & advertising, referral programme set - up. |
| Official App Launch in Lisbon | 01/06/2026 | 30 | Public release on App store/Google play store |
| Post-Launch Maintenance & Continuous Updates | 01/07/2026 | Ongoing | Bug fixes, feature enhancements, customer support |

| | | | |
|---|---|---|---|
| Growth & Scaling | 01/07/2026 | Ongoing | Growth, user retention, brand building and city presence scaling |

*Table 8. Implementation Requirements. Source: Author*

# 16. Financial Valuation

The final chapter of this business plan considers the financial viability, which is a key component in the decision making of investing in this venture or not. Financial assumptions, Sales Forecast, Costs/Expenses, Income Statement, Balance Sheet and Discounted Cash flow will be presented next.

## 16.1 Expectations & Assumptions

The assumptions made for the launch of Hospi is to start with attracting 5% of the total addressable market, which is 7350 students within the first year, out of the possible total addressable market of approximately 147,000 students in Portugal.

End User Assumptions

- User growth rate: 1% annually
- Conversion rate assumptions: 2% (7:3 choosing Silver to Gold)
- Pricing model: One-time fee & premium monthly fees
- Cost per click (advertisements): €1
- Average advertising click-through rate: 3% users (calculated on monthly basis)
- Cost per impression (CPI): €0.5
- Average advertisements hosting impressions: low engagement of 10% daily active users, with 1.5 sessions per day, seeing 2 - 5 advertisements in this time. (ranges from 1.3 million impressions in year 1 - 6.9 million impressions in year 5)
- 10% customers will come from referral programme
- Users will be subscribed to Hospi for, most likely, one month in the time they find a room/roommate

Market & Growth Assumptions

- Tax rate: 23% (Portugal)
- Annual growth rate: 5%
- Market Sales: 11.43 billion USD (2023), recalculated to 12.6 billion for 2025 (year 1)
- Inflation & cost fluctuations: 2.3% (euro area annual rate)
- Marketing & Sales positions increase as the application expands into further regions in years three and five, increasing the headcount and thus salaries

Revenue Streams
The revenue streams of Hospi will come from the following:

- Access to the application: €5.99
- Silver Package Premium: €9.99
- Gold Package Premium: €16.99
- Advertisements Hosting (CPI): €0.5/ impression
- Advertisement Clicks: €1

### 16.2 Sales Forecast

Estimating the future sales for the following five years once the business launches will not only give insight into the possible long-term performance of the business, but also help direct business decisions when it comes to managing workforce, cash flow and resources. Considering the target sales of the first year being 7350 students, as well as considering the stage of where the business is at in the first year - being that for the first-year premium features will not yet be available - we will determine the first year of income to be solely from the fee to download the application and receive the basic functioning. Advertisements will also only be put in place once the option to opt - out of these by buying the premium package becomes available. This would total to €44026.5 (7350 x €5.99) for year one. This is based on the assumption that most students will find their accommodation within one month of using Hospi, and therefore will no longer pay for a subscription.

From the second year onwards, premium packages as well as revenue from advertisements will be introduced. It is predicted that 2% of customers will convert from the basic package to the silver or gold premium (7:3). In addition, revenue from advertisement will be accounted for, with the cost per click and cost per impression.

Expansion to further student cities will begin to take place in the third year of business, starting with Porto, Madrid and Barcelona. Therefore, the total addressable market will expand to an additional 250,000 students. This is the total median student population in Madrid and Barcelona, taking into account international students but also a proportion of local students. This will greatly increase the number of users and therefore estimated sales as we begin on a 7% user rate in year three for both the Portuguese and Spanish market.

The fourth year of business will be focusing on establishing a strong brand in the new Spanish market (and current Portuguese market) to build the popularity of the app, trust and loyalty of the customers. Year five will focus on further expansion into the Dutch market, with the additions of Amsterdam, Utrecht and Groningen. These cities were chosen because of their

student and overall popularity. This will increase the total addressable market by 125,000. Reaching a total addressable market in year five of 522,000 customers.

| **Sales Forecast** | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** |
|---|---|---|---|---|---|
| Forecast for User Rates | 5% | 6% | 7% | 8% | 9% |
| Estimated Sales | 7350 | 8820 | 27790 | 31760 | 46980 |
| | | | | | |
| App Access & Basic Package | € 44.026,50 | € 52.832,00 | € 166.462,00 | € 190.242,00 | € 281.410,00 |
| Silver Package | € 0,00 | € 1.230,00 | € 3.888,00 | € 4.445,50 | € 6.571,00 |
| Gold Package | € 0,00 | € 900,00 | € 2.834,00 | € 3.238,00 | € 4.789,00 |
| Advertisements Hosting | € 0,00 | € 650.000,00 | € 2.000.000,00 | € 2.300.000,00 | € 3.450.000,00 |
| Advertisement Clicks | € 0,00 | € 3.175,20 | € 10.004,00 | € 11.433,60 | € 16.912,80 |
| | | | | | |
| VAT | 23% | 23% | 23% | 23% | 23% |
| **Total Sales without VAT** | **€ 44.026,50** | **€ 708.137,20** | **€ 2.183.188,00** | **€ 2.509.359,10** | **€ 3.759.682,80** |
| Total Sales with VAT | € 54.152,60 | € 871.008,00 | € 2.685.321,00 | € 3.086.511,70 | € 4.624.409,80 |

*Figure 10. Sales Forecast. Source: Author*

### 16.3 Business Expenses/Costs

Start-up costs have been broken down into initial start-up costs (first year) and the investment costs from years one to five. To get the application and business up and running, a value of approximately €150,000 is required. This can be broken down into three categories, covering the business setup and legal costs, marketing and branding and technology and product development.

During the running of the business, from years one to five, investment into the application development and security will ensure that it performs at its best whilst also complying with safety regulations. Investment into marketing will help to increase user acquisition as well as expand the promotion of the brand. Within this, the referral programme will allow for further customer trust and loyalty, as well as increase our customer reach. This will incur a cost for the company as referrals will benefit monetarily in this scheme. For those using a referral link to sign up to Hospi, they will receive a discount of €2, bringing their total to €3.99 for access to the application and basic package. It has been assumed that 10% of customers will come from the referral programme. This will begin in the second year of business. Finally, operations and staffing hold the highest cost, as Hospi aims to provide a fair salary for employees and believes that security is one of the top priorities for the business. Marketing and sales positions and thus costs will greatly increase as the application expands regionally, beginning in year three, with two regional positions for each additional country.

| Investment Costs (years 1 - 5) | | Year 0 | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|---|---|---|---|---|---|---|---|
| **Technology & Product Development** | | | | | | | |
| App Development | Capital | | € 5.000,00 | € 5.115,00 | € 5.232,65 | € 5.353,00 | € 5.476,11 |
| App Hosting & Infrastructure | Cogs | | € 110,00 | € 112,53 | € 115,12 | € 117,77 | € 120,47 |
| App Maintanence & Updates | Cogs | | € 4.500,00 | € 4.603,50 | € 4.709,38 | € 4.817,70 | € 4.928,50 |
| **Marketing & User Acquisition** | | | | | | | |
| Google Ads Campaign (SEO) | Op Exp | | € 1.800,00 | € 1.841,40 | € 1.883,75 | € 1.927,08 | € 1.971,40 |
| University Partnerships | Op Exp | | € 0,00 | € 0,00 | € 0,00 | € 0,00 | € 0,00 |
| App Store Optimization | Op Exp | | € 12.000,00 | € 12.276,00 | € 12.558,35 | € 12.847,19 | € 13.142,68 |
| Referral Programme | Op Exp | | € 0,00 | € 1.764,00 | € 5.558,00 | € 6.352,00 | € 9.396,00 |
| **Operations & Staffing** | | | | | | | |
| Security & Compliance | Op Exp | | € 12.000,00 | € 12.276,00 | € 12.558,35 | € 12.847,19 | € 13.142,68 |
| Virtual Office License | Op Exp | | € 600,00 | € 613,80 | € 627,92 | € 642,36 | € 657,13 |
| Trademarks & Patents | Op Exp | | € 0,00 | € 0,00 | € 0,00 | € 0,00 | € 61,00 |
| Staff Salaries | Op Exp | | € 108.000,00 | € 108.000,00 | € 156.000,00 | € 159.588,00 | € 211.258,52 |
| **Initial Start-Up Costs** | Op Exp | € 14.820,00 | | | | | |
| ***Total*** | | **€ 14.820,00** | **€ 144.010,00** | **€ 146.602,23** | **€ 199.243,51** | **€ 204.492,28** | **€ 260.154,50** |

*Figure 11. Business expenses/costs. Source: Author*

## 16.4 Income Statement

The income statement has been prepared by calculating the company's sales revenue and expenses previously, to determine the net profit and earnings of each year. In the first year, the business does not generate any earnings, resulting in an initial loss. However, from year two and onwards, the company is projected to achieve strong financial growth with net earnings exceeding €400,000 in year two and reaching approximately €2,695,000 by year five. The primary driver of expenses is the increase in operations and staffing costs, which arise as expansion from Lisbon to Porto, Spain and the Netherlands takes place. It is important to note that no costs have been allocated to a physical office during the first five years as all employees are initially expected to work remotely, to keep operating expenses down. As Hospi continues to scale, local offices will no doubt become necessary and at that time will be accounted for. Throughout the forecasted period, gross profit margins remain strong, reflecting the low consistent cost of goods sold relative to revenue.

Furthermore, the business will reach profitability by the second year, which is relatively quick for a start-up, highlighting the strong market potential. Operating expenses, although increasing as Hospi expands, grow at a slower rate than revenue leading to improved operating margins. Additionally, EBITDA becomes strongly positive from year two onwards. Overall, the income statement illustrates a financially sustainable and scalable business, positioning Hospi as an attractive opportunity for future investors. *Figure 12. Income Statement. Source: Author*

| Income Statement in €'s | Year 0 | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|---|---|---|---|---|---|---|
| **Revenue** | | € 44.027 | € 708.137 | € 2.183.188 | € 2.509.359 | € 3.759.683 |
| Cost of Goods Sold | | € 4.610 | € 4.716 | € 4.824 | € 4.935 | € 5.049 |
| **Gross Profit** | | € 39.417 | € 703.421 | € 2.178.364 | € 2.504.424 | € 3.754.634 |
| **Operating Expenses** | | | | | | |
| Marketing & User Acquisition | | € 13.800 | € 15.881 | € 20.000 | € 21.126 | € 24.510 |
| Operations & Staffing | | € 135.420 | € 120.890 | € 169.186 | € 173.078 | € 225.119 |
| Initial Start-Up Costs | € 14.820 | | | | | |
| **Total Expenses** | € 14.820 | € 149.220 | € 136.771 | € 189.186 | € 194.204 | € 249.629 |
| **EBITDA** | € -14.820 | € -109.804 | € 566.650 | € 1.989.177 | € 2.310.220 | € 3.505.004 |
| **Depreciation\Amortization** | € 0 | € 833 | € 2.519 | € 4.244 | € 5.175 | € 5.294 |
| **Operating Profit** | € -14.820 | € -110.637 | € 564.131 | € 1.984.933 | € 2.305.045 | € 3.499.711 |
| **Interests paid\(received)** | € 0 | € 0 | € 0 | € 0 | € 0 | € 0 |
| **Profit Before Tax** | € -14.820 | € -110.637 | € 564.131 | € 1.984.933 | € 2.305.045 | € 3.499.711 |
| **Corporate Tax (23%)** | € -3.409 | € -25.446 | € 129.750 | € 456.535 | € 530.160 | € 804.933 |
| **Net Profit \Earnings** | € -11.411 | € -85.190 | € 434.381 | € 1.528.399 | € 1.774.885 | € 2.694.777 |

### 16.5 Discounted Cash Flow

To estimate the value of the business, a Discounted Cash Flow (DCF) analysis has been conducted. This method estimates how much a company is worth today by looking at the cash it is expected to generate in the future, whilst also adjusting to reflect the time value of money. In this case, the discounted cash flow analysis outlines the projected financial performance of Hospi from launch, for the following five years.

The initial two years reflect the early investment phase, resulting in a negative EBITDA and significant capital expenditure. In Year 0, the business will generate a negative EBITDA of €-14,820 which will be followed by a further loss in Year 1 of €-109,804. These losses are primarily due to the initial app development, launch expenses and limited revenue generation. In addition, Year 1 will see a loss of approximately €-8,700 due to capital expenditures and increase in working capital requirements, resulting in a negative cashflow. However, from Year 2 and onwards, the financial trajectory improves significantly, with EBITDA becoming positive and rising to approximately €3,5 million by 2030. As a consequence, free cash flow rises as well to €2,278,890 by 2030. Despite ongoing investments into app development, these cash outflows are small in relation to operational earnings which ultimately supports strong net cash flow generation.

To assess the present value of these cash flows, each free cash flow has been discounted using a WACC of 11.82%. This WACC has been calculated using benchmark values, using sources such as Damodaran and the European Central Bank. The discount factors range from 0.89 in Year 0, to 0.51 in 2030, capturing the time value of money and increasing uncertainty of long-term projections. Despite early losses, positive and growing cash flows from Year 2 and onwards are evident. For example, the discounted cash flow from Year 3 until Year 5 climbs from approximately €1.12 million to €1.16 million in present value terms. Summing all discounted cash flows yields an enterprise value of over €3,5 million which reflects the long-term potential of the business assuming the underlying assumptions regarding growth, market penetration and external business factors do hold true. This value emphasises the scalability and profitability of the business.

In conclusion, this DCF analysis not only supports the feasibility of Hospi as a viable business venture but also illustrates its financial attractiveness to potential investors. The expected turnaround from initial losses to consistent profitability by Year 2 signals a promising trajectory for Hospi following its initial capital investments. This potential for strong financial performance is likely to generate significant investor value as the business scales. That said, it is crucial to acknowledge that this valuation is highly sensitive to key underlying assumptions, and for the projected outcomes to materialise, these assumptions must hold true throughout the business's growth trajectory.

| **Cash flow** | | | | | | | |
|---|---|---|---|---|---|---|---|
| Period | **Year 0** | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | |
| EBITDA | | € -14.820 | € -109.804 | € 566.650 | € 1.989.177 | € 2.310.220 | € 3.505.004 |
| Tax Payments | | € 0 | € 0 | € 0 | € -100.895 | € -560.838 | € -1.116.445 |
| Capex App Development | | € 0,00 | € -5.000 | € -5.115 | € -5.233 | € -5.353 | € -5.476 |
| Working Capital | | € 0 | € -3.669 | € -55.343 | € -122.921 | € -27.181 | € -104.194 |
| Free Cash Flow | | € -14.820 | € -118.472 | € 506.192 | € 1.760.129 | € 1.716.848 | € 2.278.890 |
| WACC = 11.82% | | | | | | | |
| Discount Period | | 0 | 1 | 2 | 3 | 4 | 5 |
| Discount Factor | 0.89 | 0.799 | 0.715 | 0.639 | 0.572 | 0.51 | |
| Discounted Cash Flow | | -13189,8 | -€ 94.777,60 | € 364.458,24 | € 1.126.482,56 | € 978.603,36 | € 1.162.233,90 |
| Enterprise Value | € 3.523.810,66 | | | | | | |

*Figure 13. Discounted Cash Flow Analysis. Source: Author*

# 17. Conclusion

To conclude, this thesis has explored one of the most pressing issues faced by students today - the access to affordable and suitable housing. Through a literature review, market analysis and primary research, this project has demonstrated the need for a solution to the global student housing crises, rising urbanisation, increase in international mobility and ultimately the commodification of students in both private Purpose-Built Student Accommodations (PBSA) and the already existing online platforms. The current avenues of finding housing, whilst offering convenience, often neglect the realities for students of high rental costs, lack of housemate compatibility, safety concerns when booking online and whilst living at the property and ultimately a sense of disempowerment in the housing search process.

In response to these challenges, this thesis proposes an innovative and student-led digital solution, Hospi. This mobile application, designed to reshape the housing search experience exclusively for students, allows users to find rooms or roommates on one intuitive and gamified swiping interface. Hospi gives the control back to the students, allowing them to filter their lifestyle preferences, location and pricing whilst ensuring verification of profiles. Through primary research, results affirmed that students were willing to adopt such a platform, with 84% of respondents likely or very likely to use such an application. Importantly, the value proposition resonates with users, not just because of the format of the application, but because it focuses on the desire for transparency, agency and community in the housing process.

The financial outlook for Hospi is promising and highlights its potential as a successful venture in the coming years. The sales projections suggest a solid growth trajectory, particularly with the rollout of premium features and the introduction of advertising revenue, along with expansion into new student markets. Whilst the initial years may pose some challenges with negative cash flow due to upfront costs, the forecast indicates that profitability will be achieved by year two, and an enterprise value of over €3.5 million demonstrates the company's financial viability. By focusing on smart expense management and effective user acquisition strategies, Hospi appears well-equipped to attract investors and firmly establish itself within the competitive landscape.

Lisbon, as the pilot city, reflects many of the systemic issues discussed throughout this thesis - rising rental costs, lack of regulation and minimal support from Higher Education Institutions for housing. In addition, Lisbon is now a hub for innovation and the government is providing initiatives to encourage entrepreneurship. These factors make it an ideal location for

the launch of this venture. However, the vision for Hospi extends beyond Lisbon and with its scalable potential aims to reach other major student cities across Europe and further.

In sum, Hospi will reimagine how students find their homes. It challenges the commodification of student life, leveraging digital innovation to build a platform promoting trust, compatibility and affordability. As universities and governments are unable to keep up with the student housing crisis, Hospi represents a timely and empowering step forward where students can feel once again at home, wherever they study.

# 18. Technological Innovation & Future Ideas

Hospi will need to focus on technological innovation and anticipate the future journey of the business to maintain a competitive advantage over both direct and indirect competitors within the market. One aspect of Porter's traditional 'Five Forces' framework which was not mentioned previously is the role of complements (Schilling, 2017). Complements are goods or services that, when combined with the business's existing offering, make the overall system more attractive to customers. In fact, the availability of complementary goods often leads to the emergence of dominant designs, as complements create self-reinforcing cycles: more complements attract more users, and more users in turn attract more complement providers. This concept closely relates to the key principles of technological innovation management, which highlights how building a strong network of users, offering related products or services, and creating a large customer base can significantly speed up the adoption of new ideas and help a company become a market leader (Schilling, 2017). In the context of Hospi, strategic partnerships with affordable: moving companies, furniture rental services, tenant insurance providers, and student lifestyle platforms would serve as critical complements that significantly enhance the platform's overall value proposition. By building a broader ecosystem around its core service, Hospi can increase user satisfaction, raise switching costs, and strengthen its market position. Therefore, applying Porter's complements theory alongside broader technological innovation frameworks will enable Hospi to maximise network effects, better respond to technological changes, and sustain a strong competitive advantage in an increasingly dynamic market.

## 19. Bibliography

AICEP (2024). Open economy https://www.portugalglobal.pt/en/investment/why-portugal/reasons-to-invest/open-economy/

AICEP & EY Parthenon (2024) Invest in Portugal Digital sector report 2024. Retrieved January 13, 2025, from https://www.portugalglobal.pt/media/ztlmymv3/digital-industry-report.pdf

Ali, B., & Anwar, K. (2021). Porter's Generic Competitive Strategies and its influence on the Competitive Advantage. ResearchGate. https://www.researchgate.net/publication/352181915_Porter

Barr, A. (2024, October 31). Portugal & Lisbon Real Estate Market 2024. https://www.linkedin.com/pulse/portugal-lisbon-real-estate-market-2024-adam-barr-fn2df/

Berlind, D. (2024) AI in Renting: Enhanced Security, Streamlined Services. https://www.nar.realtor/magazine/real-estate-news/technology/ai-in-renting-enhanced-security-streamlined-services

Bihari, S (2023) Analyzing the Challenges and Prospects of Gross Enrollment Ratio (GER) in Higher Education. Multidisciplinary Approach in Arts, Science & Commerce (Volume- 5). Google Books. https://books.google.pt/books?hl=en&lr=&id=Tf3KEAAAQBAJ&oi=fnd&pg=PA31&dq=gross+enrollment+ratio&ots=Cqk5GFO0gK&sig=LOYvt-uhm7DusrNvsuBoABVAxp8&redir_esc=y#v=onepage&q=gross%20enrollment%20ratio&f=false

Bjerke, M. B., & Renger, R. (2017). Being Smart about Writing SMART Objectives. Evaluation and Program Planning, 61(1), 125–127. https://doi.org/10.1016/j.evalprogplan.2016.12.009

Blazew. (2024). House rental Platforms market evolution: Global trends and regional dynamics (2024 - 2031). https://www.linkedin.com/pulse/house-rental-platforms-market-evolution-global-trends-regional-ceqfc/?trackingId=VvmBo%2B7uS9uCx4AU3QYIfg%3D%3D

Busby, E. (2019, December 25). Thousands of students left in lurch as universities fail to complete accommodation | The Independent. The Independent. https://www.independent.co.uk/news/education/education-news/students-university-accommodation-building-delays-campus-expansion-a9243071.html

Caldero, R. (2024, May 13). How Portugal Aims to Tackle One of Europe's Worst Housing Affordability Crises. The Rio Times. https://www.riotimesonline.com/how-portugal-aims-to-tackle-one-of-europes-worst-housing-affordability-crises/

Calvo, D. M. (2021). A wonderful but uncertain time: youth transitions of Erasmus students and Lisbon's housing crisis. Springer eBooks (pp. 453–464). https://doi.org/10.1007/978-3-030-64235-8_40

Castro, L. (2022, March 25). How to create a business in Portugal: limited liability companies. Lexidy 2024. https://www.lexidy.com/blog/how-to-create-a-business-in-portugal-limited-liability-companies/

Clarew. (2024, October 24). The Future of Rental Platforms: How Technology is Transforming the Housing Market. Business Case Studies. https://businesscasestudies.co.uk/the-future-of-rental-platforms-how-technology-is-transforming-the-housing-market/

Clark, V., & Tuffin, K. (2014). Choosing housemates and justifying age, gender, and ethnic discrimination. Australian Journal of Psychology, 67(1), 20–28. https://doi.org/10.1111/ajpy.12054

Clark, V., Tuffin, K., & Bowker, N. (2020, January 1). Managing conflict in shared housing for young Adults. | EBSCOhost. https://openurl.ebsco.com/EPDB%3Agcd%3A10%3A13262298/detailv2?sid=ebsco%3Aplink%3Ascholar&id=ebsco%3Agcd%3A147693456&crl=c&link_origin=www.google.com

Cocola-Gant, A., & Calvo, D. M. (2023b). The platformization of student housing and the rise of Mid-Term rentals. The case of uniplaces in Lisbon. Tijdschrift Voor Economische En Sociale Geografie, 114(5), 431–445. https://doi.org/10.1111/tesg.12560

Código do Direito de Autor e dos Direitos Conexos (CDADC) [Code of Copyright and Related Rights], Law No. 45/85 of September 17, 1985, last amended by Law n.º 16/2008 [English Version] | wilmap. (2018). Stanford.edu. https://wilmap.stanford.edu/entries/codigo-do-direito-de-autor-e-dos-direitos-conexos-cdadc-code-copyright-and-related-rights

Coherent Market Insights Pvt Ltd. (2024). Online Home Rental Market Report, Trends, Share & Insights. Coherent Market Insights. https://www.coherentmarketinsights.com/industry-reports/online-home-rental-market

Damodaran, A. (2025). Betas by Sector (US). Nyu.edu. https://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/Betas.html

Delclós, C. (2020). Housing the digital age: Trends and implications. CIDOB. https://www.cidob.org/en/publications/housing-digital-age-trends-and-implications

DLA Piper. (2024). Data protection laws in Portugal - Data Protection Laws of the World. Dlapiperdataprotection.com. https://www.dlapiperdataprotection.com/index.html?t=law&c=PT

Donaldson, E. (2024, May 22). Portugal property market outlook 2024. Idealista/News. https://www.idealista.pt/en/news/property-for-sale-in-portugal/2024/05/22/63953-portugal-property-market-outlook-2024

European Central Bank (2025, January 28). The euro area bank lending survey - Fourth quarter of 2024. European Central Bank. https://www.ecb.europa.eu/stats/ecb_surveys/bank_lending_survey/html/ecb.blssurvey2024q4~e1ddae0f19.en.html

European Commission. (2023). European Economy 2023 Country Report Portugal. 2023 Country Report Portugal. https://doi.org/10.2765/375567

European Commission (2023). Digital Decade Country Report 2023 Portugal. https://www.iapmei.pt/getattachment/PRODUTOS-E-SERVICOS/Industria-e-Sustentabilidade/Transformacao-digital/PT_country_report_IdvUzry1zedxDdeJqTI6NHwkqAs_98630-(1).pdf.aspx

European Commission. (2023). The EU's Digital Services Act. European Commission. https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/digital-services-act_en

European Council. (2024, June 13). The general data protection regulation. Consilium. https://www.consilium.europa.eu/en/policies/data-protection-regulation/

European Union. (n.d.). European Union Intellectual Property Office | European Union. European-Union.europa.eu. https://european-union.europa.eu/institutions-law-budget/institutions-and-bodies/search-all-eu-institutions-and-bodies/european-union-intellectual-property-office-euipo_en

Eurydice Unit Portugal (2023) Portugal: National Plan for Housing in Higher Education (PNAES).https://eurydice.eacea.ec.europa.eu/news/portugal-national-plan-housing-higher-education-pnaes

Farah, Agarwal, A., Gupta, A., Mittal, D., & Signal, K. (2022). Analysis of problems faced by people living in shared accommodation. International Research Journal of Engineering and Technology (IRJET), 09(05), e-ISSN: 2395-0056.

França, T., Cairns, D., Calvo, D. M., & De Azevedo, L. (2021). Lisbon, the Portuguese Erasmus city? Mis-match between representation in urban policies and international student

experiences. Journal of Urban Affairs, 45(9), 1664–1678. https://doi.org/10.1080/07352166.2021.1950544

Gemeente Utrecht. (n.d.). Studying | gemeente Utrecht. https://www.utrecht.nl/city-of-utrecht/studying#:~:text=Utrecht%20is%20a%20lively%20student,and%20more%20than%2070.000%20students

González, J. (2023). International student housing: How are exchange students in Europe navigating the housing crisis? In European Students' Union. Erasmus Student Network - European Students' Union.

Gov.uk. (2016). Directive (EU) 2016/943 of the European Parliament and of the Council of 8 June 2016 on the protection of undisclosed know-how and business information (trade secrets) against their unlawful acquisition, use and disclosure (Text with EEA relevance). Legislation.gov.uk. https://www.legislation.gov.uk/eudr/2016/943

Grand View Research. (n.d) Student Accommodation Market Size, Share & Trends Analysis Report by accommodation type (Purpose-Built student Accommodation, University-Managed Accommodation), by education grade, by region, and segment Forecasts, 2024 - 2030. https://www.grandviewresearch.com/industry-analysis/student-accommodation-market-report#

Grant, R.M. (2021). Contemporary Strategy Analysis. [online] Google Books. John Wiley & Sons. Available at: https://books.google.co.uk/books?hl=en&lr=&id=TadJEAAAQBAJ&oi=fnd&pg=PR5&dq=Grant.

HousingAnywhere. (2024). Your guide to the cost of living in Lisbon (2024). HousingAnywhere. https://housinganywhere.com/Lisbon--Portugal/cost-of-living-lisbon

Ilstedt, S. (2022). The value of being close: Social and ecological sustainability in co-living for students. Proceedings of DRS. https://doi.org/10.21606/drs.2022.413

Industry Expert Techniques. (2024, May 31). The "House Rental Platforms Market" reached a valuation of USD xx.x Billion in 2023, with projections to achieve USD xx. Linkedin.com. https://www.linkedin.com/pulse/house-rental-platforms-market-size-analysis-mztpf/

Internationalization of the economy. (n.d.). Diplomatic Portal. https://portaldiplomatico.mne.gov.pt/en/foreign-policy/internationalization-of-the-economy

International students. (2024, January 24). Migration Data Portal. https://www.migrationdataportal.org/themes/international-students

International Trade Administration. (2023, January 6). Portugal - Information and Communications Technology. Www.trade.gov. https://www.trade.gov/country-commercial-guides/portugal-information-and-communications-technology

JLL Sweden. (2024). Europe's student housing shortage to reach 3.2 million over the next five years. https://www.jllsweden.se/en/newsroom/europes-student-housing-shortage-to-reach-32-million-over-the-next-five-years

J+Legal. (n.d.). Portuguese Law for startups and scaleups The Portuguese Law for startups and scaleups. A Flash Alert on the hottest topic of the Portuguese Ecossystem! Retrieved December 11, 2024, from https://jlegal.pt/wp-content/uploads/2023/05/Flash-Alert-Portuguese-Law-for-Startups-and-Scaleups64219.379105.1.pdf

João Raínho (2024). Startups in Portugal: your 5-minute read | NEWCO Blog. Newco.pro; NewCo. https://www.newco.pro/en/resources/articles/startups-in-portugal-your-5-minute-read

Kallin, H. (2024). Victims of studentification? Variegated student experiences of housing precarity and homelessness in Edinburgh. Scottish Geographical Journal, 1–19. https://doi.org/10.1080/14702541.2024.2372623

Kołodziejski, M. (2019). Policy Department for Structural and Cohesion Policies. https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/629190/IPOL_BRI(2019)629190_EN.pdf
KPMG AG Wirtschaftsprüfungsgesellschaft (2024). Cost of Capital Study 2024: The New Dilemma: Balancing Interest Rates and Growth. KPMG AG Wirtschaftsprüfungsgesellschaft. https://assets.kpmg.com/content/dam/kpmgsites/ch/pdf/cost-of-capital-study-2024.pdf
Lee, C. (2024). The market formation of private sector, purpose built student accommodation in Sheffield 2000–2019. Geographical Journal. https://doi.org/10.1111/geoj.12601
Lima, A. (2024). Students have more accommodation, but average price per bed rises 8%.https://www.iberian.property/news/residential/students-have-more-accommodation-but-average-price-per-bed-rises-8/
Limited Liability Company in Portugal | LTA. (2024). https://lta-portugal.pt/en/article/limited-liability-company-sociedade-por-quotas-in-portugal#:~:text=Portuguese%20law%20also%20permits%20the,companies%20looking%20for%20total%20control
Mackie, P. K. (2016). Young people and housing: identifying the key issues. International Journal of Housing Policy, 16(2), 137–143. https://doi.org/10.1080/14616718.2016.1159273
MarketQuest Solutions. (2024). Housing Rental Platform Market Share Analysis and scope Forecast 2024-2031. https://www.linkedin.com/pulse/housing-rental-platform-market-share-analysis-scope-6f2uf/
Milne, R.A. (2019). Too little, too late? An investigation into the delayed completion of Purpose Built Student Accommodation in the Private Rented Sector and the impact on resident's psychological well being. [Bachelor dissertation, University of Portsmouth]. 18.
Minimum wage and average salary in Portugal in 2025 | Expatica. (2025, March 6). Expatica Portugal. https://www.expatica.com/pt/working/employment-law/minimum-wage-in-portugal-927429/
Mochan, A. (2024, February 19). Student experiences of purpose-built student accommodation. UK Collaborative Centre for Housing Evidence. https://housingevidence.ac.uk/student-experiences-of-purpose-built-student-accommodation/
Nasreen, Z., & Ruming, K. (2021). Struggles and opportunities at the platform interface: tenants' experiences of navigating shared room housing using digital platforms in Sydney. Journal of Housing and the Built Environment, 37(3), 1537–1554. https://doi.org/10.1007/s10901-021-09909-x
Neto, D. S., & Ribeiro, R. (2024). Crise do alojamento estudantil em Portugal: Análise da opinião pública em redes sociais. Cidades, Comunidades E Território/Cidades Comunidades E Territórios, 48. https://doi.org/10.15847/cct.34137
OECD. (2023, March 14). OECD Environmental Performance Reviews: Portugal 2023. OECD.https://www.oecd.org/en/publications/2023/03/oecd-environmental-performance-reviews-portugal-2023_13d6c540.html
Political stability by country, around the world | TheGlobalEconomy.com. (2023). TheGlobalEconomy.com. https://www.theglobaleconomy.com/rankings/wb_political_stability/
Portugal - Market Overview. (2024). International Trade Administration | Trade.gov. https://www.trade.gov/country-commercial-guides/portugal-market-overview
Portugal - the World Factbook. (2024.). https://www.cia.gov/the-world-factbook/countries/portugal/#government
Portugal - United States Department of State. (2024). United States Department of State. https://www.state.gov/reports/2024-investment-climate-statements/portugal/

Precision Reports (2024) Co-Living Market Size, current insights and demographic trends 2024-2030 - HackMD. HackMD. https://hackmd.io/@precisionreportsco-jaguar/co-living-market-2024-2032

Redação. (2024). Shortage of properties in Portugal causes house prices to soar by 10%. Idealista/News. https://www.idealista.pt/en/news/property-for-sale-in-portugal/2024/04/11/63461-shortage-of-properties-in-portugal-causes-house-prices-to-soar-by-10

Saha, S (2023) Online Home Rental Market Snapshot (2023 to 2033) https://www.futuremarketinsights.com/reports/online-home-rental-market

Savills, 2023. Riding the Wave | Student Housing Accomodation. (2023). https://pdf.euro.savills.co.uk/portugal/student-house-report-2023.pdf

Shea, E. (2023, November 10). How universities are responding to the student accommodation crisis — HE professional. HE Professional. https://heprofessional.co.uk/edition/how-universities-are-responding-to-the-student-accommodation-crisis

Schilling, Melissa. (2017). Strategic Management of Technological Innovation (Fifth Edition). : McGraw-Hill Education.

Sotomayor, L., Tarhan, D., Vieta, M., McCartney, S., & Mas, A. (2022). When students are house-poor: Urban universities, student marginality, and the hidden curriculum of student housing. Cities, 124, 103572. https://doi.org/10.1016/j.cities.2022.103572

Student Housing in Numbers – ASVA Student Union. (n.d.). https://asva.nl/en/interests/student-housing/student-housing-in-numbers/#:~:text=More%20than%20120%2C000%20students%20study,but%20do%20not%20study%20here

Study in Barcelona, Spain. (n.d.). Study.eu. https://www.study.eu/city/barcelona#:~:text=Because%20of%20all%20these%20reasons,cosmopolitan%20cities%20in%20the%20world

Study in Holland. (2014, October 28). Study in Groningen, the Netherlands. https://www.studyinholland.co.uk/city/study_in_groningen.html#:~:text=Groningen%20has%20around%20200%2C000%20inhabitants,for%20being%20a%20student%20town

The best universities in Madrid for international students. (2025). HousingAnywhere. https://housinganywhere.com/Madrid--Spain/best-universities-madrid

The Portugal News. (2024). What are the new housing measures for Portugal? https://www.theportugalnews.com/news/2024-05-13/what-are-the-new-housing-measures-for-portugal/88765

The Scottish Government. (2022, December 13). Purpose-built student accommodation (PBSA) and student housing: research. https://www.gov.scot/publications/research-purpose-built-student-accommodation-pbsa-student-housing-scotland/pages/7/

TPN/Lusa. (2023, June 8). Number of minimum wage workers drops. Theportugalnews.com. https://www.theportugalnews.com/news/2023-06-08/number-of-minimum-wage-workers-drops/78378

TPN/Lusa. (2023b, August 4). 95% of young people still live with their parents. Theportugalnews.com. https://www.theportugalnews.com/news/2023-08-04/95-of-young-people-still-live-with-their-parents/80151

Trading Economics (2024.). Portugal population. https://tradingeconomics.com/portugal/population

Trading Economics. (2019). Portugal 10-Year Government Bond Yield - quote - Chart -Historical data - news. https://tradingeconomics.com/portugal/government-bond-yield

TrustRadius. (2019). ONLINE RENTAL INDUSTRY REPORT. https://media.trustradius.com/product-downloadables/LW/4P/OJ3GMB45NSQN.pdf

Types of Organizational Structures: A guide | Miro. (n.d.). https://miro.com/. https://miro.com/organizational-chart/types-of-organizational-structures/
UNESCO. (2022). Higher education figures at a glance. https://uis.unesco.org/sites/default/files/documents/f_unesco1015_brochure_web_en.pdf
United States Department of State (2024) Portugal - United States Department of State. (2024, July 17). https://www.state.gov/reports/2024-investment-climate-statements/portugal/
Ullah, F., Sepasgozar, S. M. E., Shirowzhan, S., & Davis, S. (2021). Modelling users' perception of the online real estate platforms in a digitally disruptive environment: An integrated KANO-SISQual approach. Telematics and Informatics, 63, 101660. https://doi.org/10.1016/j.tele.2021.101660
WageIndicator (2024) Minimum Wage - Portugal https://wageindicator.org/salary/minimum-wage/portugal
Worldometer (2024). Portugal Demographics 2024 (Population, age, sex, Trends) https://www.worldometers.info/demographics/portugal-demographics/
WTO | Investment facilitation for development agreement. (n.d.). https://www.wto.org/english/tratop_e/invfac_public_e/invfac_intro_e.htm
Zhu, H., Gumus, M., & Ray, S. (2019). Short-Term housing rentals and corporatization of platform pricing. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.3344260
Zielinski, C. (2019). "We prefer our Dutch": International Students' Housing Experiences in the Netherlands. http://dspace.library.uu.nl/handle/1874/382036

# 20. Appendix

Appendix A) Porter's 5 Forces Analysis

| **Industry Analysis Porter's Five Forces** | **Low** | **Medium** | **High** |
|---|---|---|---|
| **Competitive Rivals**<br>Number of Competitors<br>Diversity of Competitors<br>Market Growth<br>Indirect Competitors<br>Switching Costs | <br><br><br><br><br>X | <br><br>X<br><br><br> | <br>X<br><br>X<br>X |
| | 1 | 2 | 9 |
| *Force Global Score* | | | **2.4** |
| **New Entrants**<br>Barriers to Entry<br>Brand Loyalty<br>Capital Requirements<br>Government Policies<br>Access to Distribution Channels<br>Switching Cost | <br><br><br><br><br><br>X | <br><br>X<br><br>X<br><br> | <br>X<br><br>X<br><br>X<br> |
| | 1 | 4 | 9 |
| *Force Global Score* | | **2.3** | |
| **Supplier Power**<br>Number & Size of Suppliers<br>Uniqueness of Suppliers (Product)<br>Company's ability to substitute | <br>X<br> | <br><br>X | X<br><br> |
| | 1 | 2 | 3 |
| *Force Global Score* | | **2** | |
| **Customer Power**<br>Number of customers<br>Competitors Differences<br>Price Sensitivity<br>Buyers ability to substitute<br>Buyer's information availability<br>Switching Costs | <br><br><br><br><br>X | <br><br>X<br><br><br> | <br>X<br><br>X<br>X<br>X<br> |
| | 1 | 2 | 12 |
| *Force Global Score* | | | **2.5** |
| **Threat of Substitutes**<br>Number of Substitute products Available<br>Buyer Propensity to Substitute<br>Relative Price Performance of Substitutes<br>Perceived Level of Product Differentiation<br>Switching Costs | <br><br><br>X<br>X | <br><br><br>X<br> | <br>X<br>X<br><br> |
| | 2 | 2 | 6 |
| *Force Global Score* | | **2** | |

| **Force Global Score Range** | **Interpretation** |
|---|---|
| 1.0 – 1.5 | Weak force |
| 1.6 – 2.3 | Moderate force |
| 2.4 – 3.0 | Strong force |

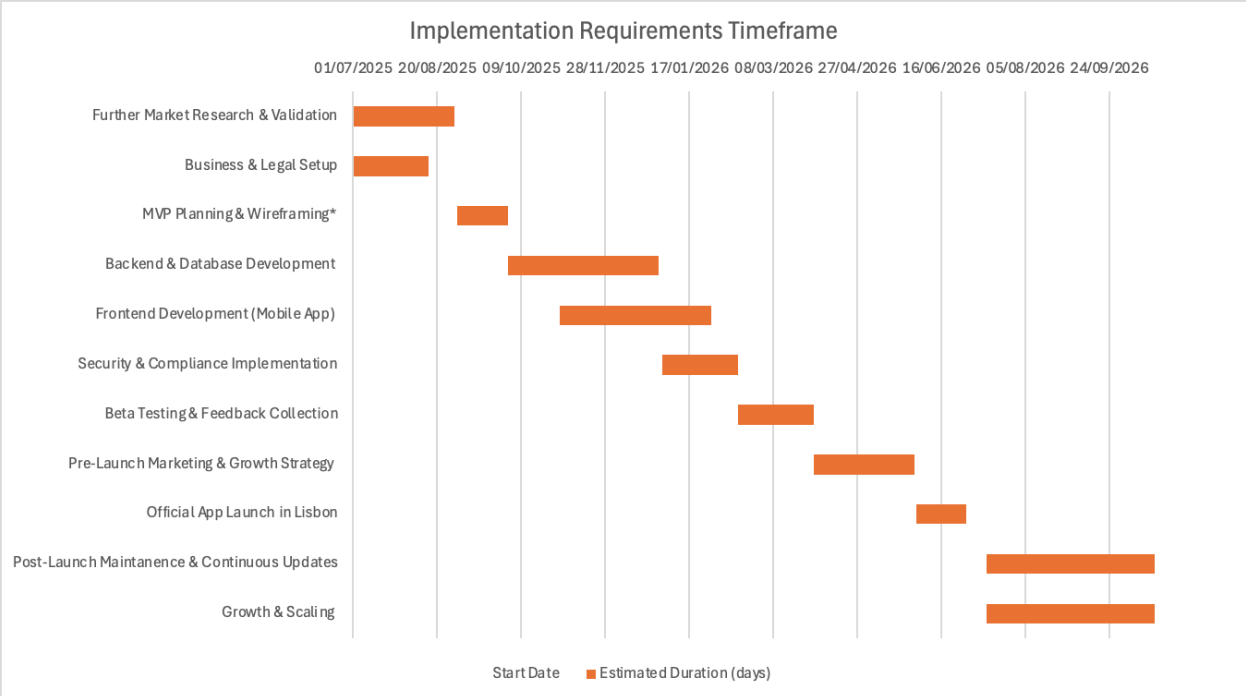
## Appendix B) Competitor Prices

| Roomie | SpareRoom | Roomster | Roomi App |
|---|---|---|---|
| Roomie Pro - 7 Days $5.99<br>Roomie + $12.99<br>**Roomie Pro - Monthly $12.99**<br>Roomie Pro - Quarterly $34.99 | 1-Week Upgrade $12.99<br>14-Day Upgrade $23.99<br>**4-Week Upgrade $25.99** | **Full access $9.99 - $49.99**<br>Id Verification $2.99 - $14.99<br>Background Check $9.99 | Safety Bundle $9.99 - $29.99<br>Roomi Gold $7.99 - $19.99<br>Premium (Weekly) $14.99<br>**Premium (Monthly) $29.99**<br>Verification Bundle (Weekly) $10.00<br>Listing Boost Credit $4.99 |
| **$12.99** | **$25.99** | **$29.99** | **$29.99** |

## Appendix C) Student Population

| City | Student Population (for application expansion) |
|---|---|
| Madrid | 45,000 (intl) - 300,000 (HousingAnywhere, 2025) |
| Barcelona | 25,000 (intl) - 200,000 (*Study in Barcelona, Spain*, n.d.) |
| Utrecht | 70,000 (Gemeente Utrecht, n.d.) |
| Amsterdam | 130,000 (*ASVA Student Union*, n.d.) |
| Groningen | 50,000 (Study in Holland, 2014) |

## Appendix D) Gantt Diagram for Implementation Requirements



## Appendix E) Cash Flow

| **Cash flow** | | | | | | |
|---|---|---|---|---|---|---|
| Period | **2026** | **2027** | **2028** | **2029** | **2030** | **2031** |
| EBITDA | € -14.820 | € -109.804 | € 566.650 | € 1.989.177 | € 2.310.220 | € 3.505.004 |
| Tax Payments | € 0 | € 0 | € 0 | € -100.895 | € -560.838 | € -1.116.445 |
| Capex App Development | € 0,00 | € -5.000 | € -5.115 | € -5.233 | € -5.353 | € -5.476 |
| Working Capital | € 0 | € -3.669 | € -55.343 | € -122.921 | € -27.181 | € -104.194 |
| Free Cash Flow | € -14.820 | € -118.472 | € 506.192 | € 1.760.129 | € 1.716.848 | € 2.278.890 |

## Appendix F) Workings for DCF

**Workings**

**Tax payments**

| Period | **2026** | **2027** | **2028** | **2029** | **2030** | **2031** |
|---|---|---|---|---|---|---|
| Opening Balance | € 0 | € -3.409 | € -28.855 | € 100.895 | € 456.535 | € 425.857 |
| Tax Credits or Liabilities | € -3.409 | € -25.446 | € 129.750 | € 456.535 | € 530.160 | € 804.933 |
| Tax payments, assuming pmts following year | € 0 | € 0 | € 0 | € -100.895 | € -560.838 | € -1.116.445 |
| Tax Credits or Liabilities closing balance | € -3.409 | € -28.855 | € 100.895 | € 456.535 | € 425.857 | € 114.345 |

**Working Capital**

| Period | **2026** | **2027** | **2028** | **2029** | **2030** | **2031** |
|---|---|---|---|---|---|---|
| Receivables, assuming 30 days payment | € 0 | € 3.669 | € 59.011 | € 181.932 | € 209.113 | € 313.307 |

**Cash Account**

| | | | | | | |
|---|---|---|---|---|---|---|
| Opening Balance | € 0 | € 135.180 | € 16.708 | € 522.900 | € 2.283.029 | € 3.999.876 |
| Shareholders Funds | € 150.000 | € 0 | € 0 | € 0 | € 0 | € 0 |
| Free Cash Flow | € -14.820 | € -118.472 | € 506.192 | € 1.760.129 | € 1.716.848 | € 2.278.890 |
| Closing Balance | € 135.180 | € 16.708 | € 522.900 | € 2.283.029 | € 3.999.876 | € 6.278.766 |

# Appendix G) DCF Calculations

WACC inputs based on Industry Standards

Risk free rate (Rf) = 3.5%
Estimated Beta = (1.4-1.8) = 1.6
Market risk premium (Rm-Rf) standard european value = 6%

Cost of Equity (Re)
Using CAPM model
Re= Rf +B (Rm-Rf)
Re= 3.5%+1.6 x 6% = 3.5% + 9.6% = **13.1%**

Cost of Debt (Rd)
Use estimate between 7-10% interest
Assume 8.5% for median balance
Rd=**8.5%**

Capital Structure (E/V and D/V)
E/V = 80% **0.8**
D/V = 20% **0.2**

Corporate tax rate= **21%**

Final WACC calculation
WACC = (0.8x13.1%) + (0.2x8.5% x (1-0.21))
WACC = 10.48% +1.34% = 11.82%
WACC = **11.82%**

$$\text{WACC} = \left(\frac{E}{V} \times Re\right) + \left(\frac{D}{V} \times Rd \times (1 - Tc)\right)$$

**where:**

$E = \text{Market value of the firm's equity}$
$D = \text{Market value of the firm's debt}$
$V = E + D$
$Re = \text{Cost of equity}$
$Rd = \text{Cost of debt}$
$Tc = \text{Corporate tax rate}$

Discount factor = 1/(1+WACC%)^number of time period

Df = 1/(1+11.82%)^5
Df (1) = 0.89
Df (2) = 0.799
Df (3) = 0.715
Df (4) = 0.639
Df (5) = 0.572
Df(6)= 0.51

Present Values

| | |
|---|---|
| Year 0 | -13189,8 |
| Year 1 | -94777,6 |
| Year 2 | 364458,24 |
| Year 3 | 1126482,56 |
| Year 4 | 978603,36 |
| Year 5 | 1162233,9 |

Enterprise Value (2025-2030) = 3523810,7

Inflation percentage = growth percentage
**g= 2.3%**

free cash flow after year 5 * 1+g

1162233,9*(1+0.023)
**1188965,3**

Terminal value = free cash flow after year 5/(WACC-growth rate)

1188965,28/11.82%-2.3%

Terminal Value = **12489131,089**

Net present terminal value = 12489131,089*0.51

Net present TV = **6369456,86**

Enterprise value =

**3523810,7**

$$DCF = \frac{CF_1}{(1+r)^1} + \frac{CF_2}{(1+r)^2} + \frac{CF_n}{(1+r)^n}$$

$CF_1$ = The cash flow for year one
$CF_2$ = The cash flow for year two
$CF_n$ = The cash flow for additional years
$r$ = The discount rate

# Appendix H) Survey Questions & Results

Do you consent to participating in this survey? 51

| - Do you consent to participating in this survey? | Percentage | Count |
|---|---|---|
| Yes | 98% | 50 |
| No | 2% | 1 |

What is your educational status? 40

| Demographics - What is your educational status? - Selected Choice | Percentage | Count |
|---|---|---|
| Undergraduate | 25% | 10 |
| Master | 75% | 30 |

What is your gender? 40

| Demographics - What is your gender? | Percentage | Count |
|---|---|---|
| Male | 25% | 10 |
| Female | 75% | 30 |

How old are you? 40

| Demographics - How old are you? | Percentage | Count |
|---|---|---|
| 21-23 years | 48% | 19 |
| 24-26 years | 45% | 18 |
| 27-30 years | 3% | 1 |
| 31+ years | 5% | 2 |

What is your current living situation? 40

| Demographics - What is your current living situation? - Selected Choice | Percentage | Count |
|---|---|---|
| Student Residence | 8% | 3 |
| Shared Apartment | 60% | 24 |
| Private Apartment | 15% | 6 |
| Living with family | 18% | 7 |

What description best fits your current roommate situation? 40

| - What description best fits your current roommate situation? | Percentage | Count |
|---|---|---|
| Previously friends who moved in together | 23% | 9 |
| Living with family | 18% | 7 |
| Friends of friends/ mutual contacts | 18% | 7 |
| Strangers | 43% | 17 |

In which region is your accommodation located? 55

**In which region is your accommodation located?**

lisboa, santos

Eindhoven, the Netherlands

Lisbon

Barreiro

Arroios

Santos

anjos

barrio alto

Saldanha

Alcântara

Cidade Universitária

Alameda

Lisbon

Marques de Pombal

Principe Real

Lisbon

Marques de Pombal

Principe Real

Lisbon

Setúbal

Setubal

Anjos

Lisbon

Entre Campos, Lisbon

Bairro Alto

Lisbon

Europe

Arroios

Saldanha

Palmela

Estoril

Lisbon

Bica

Romania

Shanghai

Lisbon - Arreiro

Arroios

How would you rate your experience in finding accommodation as a student? With 1 being extremely easy and 10 being extremely difficult. 28

| How would you rate your experience in finding accommodation as a student? W... | Average | Minimum | Maximum | Count |
|---|---|---|---|---|
| Click to write Choice 1 | 6.11 | 4.00 | 10.00 | 28 |

What challenges have you faced when looking for accommodation? 34

| Housing Experiences - What challenges have you faced when looking for accommodation? - Selected Choice | Percentage | Count |
|---|---|---|
| High rent prices | 91% | 31 |
| Lack of availability | 62% | 21 |
| Poor living conditions | 47% | 16 |
| Difficulty with roommates | 18% | 6 |
| Discrimination | 9% | 3 |
| Scams | 32% | 11 |

Have you ever had difficulty finding compatible roommates? (When searching & whilst living together) 33

| Housing Experiences - Have you ever had difficulty finding compatible roommates? (When searching & whilst living together) | Percentage | Count |
|---|---|---|
| Yes | 58% | 19 |
| No | 42% | 14 |

How long did it take for you to secure your current accommodation? 34

| - How long did it take for you to secure your current accommodation? | Percentage | Count |
|---|---|---|
| Less than a week | 9% | 3 |
| 1-3 weeks | 35% | 12 |
| 1-3 months | 56% | 19 |

How did you find your current accommodation? 34

| - How did you find your current accommodation? | Percentage | Count |
|---|---|---|
| Friends/family | 26% | 9 |
| Social media | 12% | 4 |
| University housing services | 3% | 1 |
| Real estate website or agent | 6% | 2 |
| Online housing platform | 44% | 15 |
| Private student accommodation companies (e.g. Livensa Living, Xior) | 9% | 3 |

Are you satisfied with your current housing situation? 34

| - Are you satisfied with your current housing situation? | Percentage | Count |
|---|---|---|
| Dissatisfied | 9% | 3 |
| Neither dissatisfied nor satisfied | 15% | 5 |
| Satisfied | 56% | 19 |
| Very Satisfied | 21% | 7 |

Have you ever used an app or website to find accommodation or roommates? 35

| - Have you ever used an app or website to find accommodation or roommates? | Percentage | Count |
|---|---|---|
| Yes | 80% | 28 |
| No | 20% | 7 |

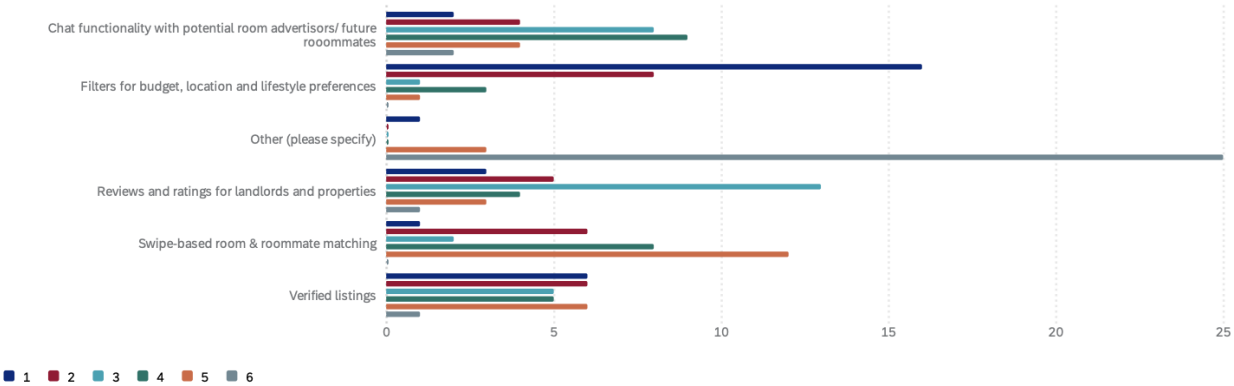
If you used an app: were you satisfied with your experience? 27

| Q28 - If you used an app: were you satisfied with your experience? | Percentage | Count |
|---|---|---|
| Yes | 56% | 15 |
| No | 44% | 12 |

How likely would you be to use a student - led app that helps you find accommodation and/or compatible roommates? 31

| - How likely would you be to use a student - led app that helps you find accommodation and/or compatible roommates? | Percentage | Count |
|---|---|---|
| Very unlikely | 3% | 1 |
| Indifferent | 13% | 4 |
| Likely | 45% | 14 |
| Very likely | 39% | 12 |

Which features would you find most helpful in such an app? 29




Would you be willing to pay for additional features or services in the app (e.g. premium filters, verified profiles) 31

| - Would you be willing to pay for additional features or services in the app (e.g. premium filters, verified profiles) | Percentage | Count |
|---|---|---|
| Yes | 61% | 19 |
| No | 39% | 12 |

How much would you consider reasonable for additional features or services? 6

| - How much would you consider reasonable for additional features or services? | Percentage | Count |
|---|---|---|
| Free | 67% | 4 |
| Up to €5/month | 17% | 1 |
| €5–€10/month | 17% | 1 |