

THE PLATFORMIZATION OF STUDENT HOUSING AND THE RISE OF MID-TERM RENTALS. THE CASE OF UNIPLACES IN LISBON

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ABSTRACT

The most common approach to student housing has been articulated by studentification literature. Furthermore, authors have highlighted how student demand attracts institutional investors to develop Purpose-Built Student Accommodation (PBSA). In this paper, we complement these approaches with a conceptualization of how digital platforms have restructured the supply of student rooms in houses of multiple occupation. Relying on business and software understandings of platforms, we first explore the case of Uniplaces in Lisbon, a platform that has imitated the Airbnb model and today is present in more than 130 cities in various countries. Second, we depict Uniplaces within a landscape of mid-term rental platforms that cater for different profiles of mobile populations, who stay in destinations for a short- or mid-term period of time. We conclude with a discussion about the potential of this market to further advance processes of transnational gentrification and weaken the position of tenants.

Key words: Platform economy; student housing; rental markets; gentrification; studentification; Lisbon

INTRODUCTION

Founded in 2012 and launched in Lisbon in 2013, Uniplaces is a digital platform which connects property owners with students and provides a payment system so that both sides can make transactions. In recent years, Uniplaces has become the Portuguese start-up most backed by venture capital, and with the aim of expanding the platform's potential, Uniplaces recruited as manager the former vice president of Airbnb, Martin Reiter. At present, Uniplaces has more than 150,000 listings in 126 European cities, alongside other listings in cities of Oceania and America. Taking Lisbon as a case study, in this paper we first explore how this platform restructured the student

housing market, particularly the supply of student rooms in houses of multiple occupation. The platform is mainly used by international students before arriving to their destination. Doing bookings through Uniplaces is seen by students to be more trustworthy than directly contacting landlords and making offline transactions with them. Second, we examine Uniplaces within a landscape of platforms that focus on mid-term rentals (MTRs); that is, the rent of rooms and apartments for a period between 1 and 11 months.

International students have been conceptualized as part of a bigger trend of youth mobilities (King 2018) in which different profiles of foreign and transient populations search for leisure opportunities in vibrant cities (Malet

Calvo 2018; Novy 2018). International students are progressively being seen not only as consumers around colleges, but also as relevant actors in the understanding of wider processes of transnational gentrification together with other populations, such as privileged migrants or digital nomads (Hayes 2021; López-Gay *et al.* 2021; Cenere *et al.* 2023). In this regard, and following the Airbnb model, several digital platforms have appeared that offer accommodation for these profiles of mobile populations. Here Uniplaces is depicted as part of an increased trend in which digital platforms aim to capture this transnational demand for monthly rentals, named by industry players as ‘flexible living’.

Lisbon is a paradigmatic example when studying these phenomena. The city has experienced an accelerated process of transformation over the course of the last decade which is fundamentally linked to the development of the many industries dedicated to hosting transnational consumers. In terms of demand, and as a response to the 2008 economic crisis, the national and local state aimed at positioning Lisbon as one of the most attractive European capitals in the global market of destinations. The Lisbon City Council, in partnership with institutions such as universities and tourism bodies, created several programs aimed at attracting transnational consumers and expanding the city’s creative, educational and entrepreneurial ecosystem. In terms of supply, and despite the increased demand for student housing, the development of Purpose-Built Student Accommodation (PBSA) has been scarce. Instead, new digital platforms have emerged that connect landlords with international students. The state made rental laws more flexible and favourable for property owners who could, in turn, replace tenants with transient populations (Estevens *et al.* 2023). In such a context, digital platforms offering accommodation for transnational consumers flourished.

The structure of the paper is as follows. We draw on platform studies to explain the emergence of Uniplaces and other MTR platforms. Relying on qualitative fieldwork, we then explore the evolution of the student housing market in Lisbon from 2013 to 2022, and demonstrate the ability of Uniplaces to reorganize the supply of private rooms for international students

into one tool. The platform made older forms of intermediation between students and landlords obsolete; in particular, classified ads and Facebook groups promoted by student associations. Next, we contextualize Uniplaces within a landscape of MTR platforms, and conclude with a discussion about the potential of this market to further exclude local populations from accessing housing.

DIGITAL PLATFORMS AND STUDENT HOUSING

The most common approach to student housing markets and their related urban transformations has been articulated by studentification literature. Following the theoretical framework of gentrification, works regarding studentification have been devoted to developing the understanding of transformations in specific neighbourhoods (particularly UK college towns), rendering them as segregated and concentrated ‘student ghettos’ (Smith 2008; Duke-Williams 2009; Smith & Hubbard 2014). However, several authors have more recently widened the links between studentification and urban change (Nakazawa 2017; Kinton *et al.* 2018; Moos *et al.* 2019; Zasina *et al.* 2023). These authors argue that more complex dynamics take place, as university students increasingly live and consume outside of student enclaves. In this regard, international students display lifestyle habits and consumption patterns that are similar to other foreign populations, such as tourists and privileged migrants (Malet Calvo 2018; Novy 2018). In either case, it has been argued that in processes of studentification the housing stock is progressively transformed into houses of multiple occupation (HMO), which cater for students. At the same time, authors have highlighted how student demand further attracts institutional investors to develop PBSA; consequently, PBSA has started to become a new asset class (Revington & August 2020).

These approaches, we suggest, should be complemented with a conceptualization of how digital platforms have reorganized rental markets, including the student accommodation sector. In their work ‘Platformisation’, Poell *et al.* (2019) suggest that two perspectives have

been fundamental in developing understandings of platforms. They refer to business and software studies and how both complement each other. In short, from a business perspective, platformization means the reorganization of economic relations around multi-sided markets, in which platforms connect consumers on the one side and sellers – third-party businesses or complementors – on the other side. The software perspective has focused on how such a process has been possible from a computational point of view. It analyses platform architectures and how complementors can integrate their services into an organizing platform. We apply these two perspectives of platformization to the private rental market, and in particular to student housing, making comparisons with Airbnb because it served as a model for other rental platforms, including Uniplaces.

From a business perspective, authors emphasize how digital platforms helped to create more efficient markets for both companies and consumers (Nieborg & Poell 2018; Kenney & Zysman 2020). What digital platforms essentially do is offer an infrastructure that connects individual buyers and sellers, while developing ratings and reputational data that gives consumers confidence to initiate trades with people they do not know (Schor 2020). The growth of platforms has also been explained due to network effects, where the value of a service increases when more people use it. From a more critical perspective, rapid growth is caused by the ability of platforms to secure venture capital (Langley & Leyshon 2017) with investors hoping this would give successful platforms an opportunity to secure monopoly profits (Kenney & Zysman 2020).

In the housing rental market, the most notorious case has been Airbnb, the platform which popularized short-term rentals (STRs). Guttentag (2015) notes that the successes of this platform rely on a technological infrastructure through which property owners can easily list their properties on a global scale, thus reaching international guests. They also have free access to services such as marketing, reservation and payment systems, which enable them to effortlessly compete with traditional accommodation enterprises. Before Airbnb, other platforms such as VRBO functioned as information distributors. The booking of

vacation rentals was a multi-step process in which guests would contact property owners and make offline agreements with them. Instead, Airbnb learned from the hotel industry and introduced an online booking system. Airbnb is therefore considered a distribution channel because it is both an aggregator of information and a reservation facilitator (O'Connor & Frew 2002).

In the last decade, different platforms emerged offering landlords the option to rent rooms, studios and apartments to university students. For instance, in the Netherlands, Housing Anywhere appeared in 2009 as a student-to-student messaging forum and became a rental platform in 2014 when it introduced an online booking system (www.housinganywhere.com); it currently has listings in 400 cities around the world. Apart from Uniplaces, other platforms that grew exponentially are AmberStudent (the United Kingdom, the United States and Australia); Location-Etudiant (France); and StudyAbroadApartments (Spain), among others. These platforms have imitated Airbnb in the sense that they offer an infrastructure where landlords can easily list their properties and use a booking and payment system. On the other side, students can search for and book accommodations before arriving to the destination, reducing search time and building trust – important challenges regarding student transnational mobility. As with Airbnb, student rental platforms not only connect market actors in an unprecedented way, but they further allow these actors to securely make transactions. This is a central point. In the early days of the internet, the supply of student rooms was publicized as classified ads on student forum websites. These websites, including Facebook groups, served as a medium for publishing information (Helmond 2015), but without the possibility of doing bookings and transactions. The evolution of Housing Anywhere is an example of this transition.

Therefore, the platformization of student housing occurs when a digital platform allows the emergence of a two-sided market and, additionally, provides tools for the transaction between the two parties. On the one hand, platforms serve as housing market intermediators connecting supply and demand. On the other hand, this intermediation is not simply

the distribution of information, but platforms allow to make a reservation and pay for the required product. Platforms have, therefore, assumed characteristics of distribution channels as they were advanced by the hotel industry in the 1990s (O'Connor & Frew 2002).

While our focus is on student housing, it is also important to see that platformization in this sense is part of a broader MTR sector. First, the triumph of the platform business model caused the rise of MTR platforms that focus on different market segments, such as corporate travel (e.g. AltoVita, HomeLike), digital nomads (e.g. NomadX) or professionals (e.g. Soptahome), among others. Second, the pandemic consolidated the international mobility of different profiles of leisure-led mobile populations who stay in destinations for a short- or mid-term period of time (Colomb & Gallent 2022). These populations typically access housing through digital platforms before arriving to the destination. To match this varied demand, all these platforms abandoned their initial market segment and now advertise themselves as MTR platforms. We will see how Uniplaces started in 2013 as a platform for international students but developed in order to capture other mobile populations, such as digital nomads and remote workers.

The landscape of platforms is also explained due to the development of digital technology for portfolio distribution. We particularly refer to channel managers, which are a type of software that allow property owners and managers to commercialize their inventory on several digital platforms – distribution channels – and synchronize bookings among them (Giannoni *et al.* 2021). Channel managers are an example of software as a service (SaaS) or web-based software. Property owners and managers subscribe to the software according to the number of properties they have, and this allows small providers to easily use this service (Göppinger & Luque 2022). Consequently, landlords, and in particular property managers, are connected through a software to different short- and mid-term rental platforms, which work as distribution channels for their inventory. The pandemic consolidated this trend because, as the occupancy rate on Airbnb dropped drastically, property managers used their channel managers to move their inventory away from

Airbnb and towards these other platforms (Cocola-Gant *et al.* 2021), including towards platforms offering rentals for international students, as will be shown.

These trends take us to the second perspective in the understanding of platforms, which is software studies. Software studies have revealed what platforms do in terms of their computational sense. The work of authors such as Helmond (2015) and Plantin *et al.* (2018) highlight the construction of a digital infrastructure in which platforms explicitly allow the connection of third parties or complementors. In this regard, platforms are programable structures because they 'provide a technological framework for others to build on' (Helmond 2015, p. 8). Platforms can be programmed through a software interface, an application programming interface (API). APIs permit third-party programs to plug into the core platform, allowing data exchange between the platform and the complementors. Taking Facebook as an example, Helmond (2015) demonstrates that essentially it is a platform because it offers an API that can be used by developers to integrate their websites and apps with Facebook. In our case, rental platforms provide their APIs so that channel managers can plug in. The complementors are property owners and managers who use those channel managers.

The development of third-party businesses on top of a core platform has created interactive networks that have been interpreted using the perspective of infrastructure studies (Plantin *et al.* 2018; Helmond *et al.* 2019; van Doorn *et al.* 2021). For instance, Plantin *et al.* (2018) suggest that the scale reached by both Google and Facebook ensured that these platforms had some of the properties of infrastructures; essentially, the widely accessible networked structures that became crucial elements for individual users, companies and even governments. In this understanding of platformization, the scope is limited to single companies which are the core organizing platforms, and to which complementors are plugged in. The digital infrastructure is around a central platform, and following this structure, authors highlighted the monopoly power of these tech giants (Langley & Leyshon 2021).

However, the point for us is to highlight how this digital infrastructure operates in

terms of platforms offering student housing and, by extension, in terms of the MTR market. In this case, there is not a core platform that works as a centralized infrastructure where complementors can plug in. Instead, we have a landscape of several platforms and the same product – the property – is listed on all platforms simultaneously. This landscape is fundamentally the restructuring of the STR market and a consolidation of a rental industry following the model implemented by Airbnb. Therefore, in understanding this digital infrastructure, we agree with van Dijck (2021) and van Dijck *et al.* (2019) that we must explore how platforms operating in a specific market shape such a market in combination with other platforms. Infrastructural power cannot be understood exclusively in terms of monopolistic domination, but rather as part of an ‘integrated platform ecosystem that allows us to inspect how platforms are behaving in relation to each other’ (van Dijck *et al.* 2019, p. 8).

By relying on these two perspectives – business and software studies – the rest of the paper will explore how Uniplaces reshaped the student housing market in Lisbon and its relationship with other platforms, particularly Airbnb.

CONTEXT OF STUDY

Lisbon is the capital of Portugal and has a population of around 530,000 inhabitants. Portugal was severely hit by the 2008 financial crisis and as a result, in Lisbon, the political decision, alongside austerity measures, was taken to place the city in the global circuit of both tourism mobilities and capital in order to combat the recession. Consequently, it has been marketed as a destination for transnational populations, including tourists, privileged migrants, digital nomads and international students (Jung & Buhr 2022; Molina Caminero & McGarrigle 2022). Between 2012 and 2019, the number of both hotels and airport arrivals doubled, while STRs increased from 900 to more than 19,000 in the same period (Ferreira *et al.* 2020; Marques Pereira 2022). Additionally, international demand was paralleled with a set of neoliberal

policies to both attract financial capital into housing markets and to give more power to landlords and investors (Tulumello & Allegretti 2021; Estevens *et al.* 2023; Jover & Cocola-Gant 2023). The consequences have been a rampant process of tourism-driven gentrification and the arrival of real estate capital seeking refuge in the Lisbon’s housing market (Barata-Salgueiro *et al.* 2017; Malet Calvo & Ramos 2018; Cocola-Gant & Gago 2021). In this context, since 2013, Lisbon has been experiencing dramatic increases in rental prices (Bento Costa 2020).

Within the urban government, the marketing of Lisbon for transnational mobile populations has been led by the Economy and Innovation Department (E&ID). Embracing Florida’s theory of the attraction of ‘creative classes’ (Florida 2002) and city branding strategies, the E&ID promoted different projects to re-imagine Lisbon for audiences other than tourists. For instance, the E&ID was responsible in 2016 for attracting the ‘WebSummit’, a world-class tech event, previously celebrated in Dublin, that connects top tech industries (Google, Amazon and Microsoft), investors, and start-ups on an annual basis. Additionally, in 2013 the E&ID launched the ‘Lisbon Erasmus City’ project. The culmination of this project was the creation in 2014 of the consortium ‘Study in Lisbon’, that unites universities, start-up incubators, student associations and the business sector. Uniplaces was created within this environment and with institutional support. The ‘Lisbon Erasmus City’ project further aimed at attracting and retaining international students and researchers, helping them to integrate into the knowledge and entrepreneur urban ecosystem. In the marketing of Lisbon, the E&ID has linked higher education facilities with leisure and nightlife and, in this way, to target international students they have made efforts that are indistinguishable from marketing campaigns used to attract young tourists or digital nomads (França *et al.* 2021). In fact, and as it has been noted in other places (Nakazawa 2017; Kinton *et al.* 2018; Moos *et al.* 2019; Zasina *et al.* 2023), students in Lisbon display consumption patterns that coexist with tourist spaces: central zones, areas close to transportation and leisure

clusters (Malet Calvo 2018). Essentially, the geographies of student life are not concentrated around colleges but spread throughout the city.

The specific marketing efforts to attract international students have proven to be effective since 2013, as shown in Table 1. The rate of incoming international students (Study-abroad students and Full-time international students¹) grew notably during the years following E&ID campaigns, and foreign students coming to Lisbon went from 7 per cent to 14 per cent of total higher education students in the last 7 years. Moreover, according to municipal authorities (CML, 2014), around 40 per cent of Portuguese students enrolled in Lisbon's HEIs leave their hometowns to study in the capital city, thus becoming consumers of student accommodation. In 2018 Lisbon had more than 59,000 students living out of their hometown with accommodation needs, and 17,000 of them were international (JLL & Uniplaces, 2019) (Table 1).

In 2013, the real estate consultancy Worx published the Student Housing Review, which is the first report ever made on Portuguese student housing. The report is useful for understanding the situation of student accommodation in Lisbon. At this time, there were only 4,000 beds in 140 different units of student accommodation. The majority of these offers were provided by university dormitories, and private PBSA represented just 19 per cent of this supply. In this sense, the report (Worx 2013) suggested that student accommodation in Lisbon was an underdeveloped, non-professional market; and that the growing expectations in attracting more international students had made this niche an excellent opportunity to invest. According to Savills' Lisbon Student Housing Market Report (Savills 2020), it is estimated that some growth of PBSA happened; an increase of around 3,000 new beds, the majority of which were luxury units.

However, considering that the number of public university dormitories has remained stable, and that the demand of students searching for accommodation in Lisbon in 2018 was around 59,000 individuals (JLL & Uniplaces 2019), it seems clear that the supply of student rooms was provided by

Table 1. Incoming international students (full-time and study-abroad mobilities) to Lisbon

	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020
Students enrolled in Lisbon's HEIs	137,774	134,403	136,552	137,579	141,266	145,594	147,165
Full-time mobility to Lisbon's HEIs	5,709	7,359	8,578	8,850	10,452	12,598	14,389
Study-abroad mobility to Lisbon's HEIs	4,620	4,915	5,138	5,795	6,535	6,762	6,825
Total mobility to Lisbon's HEIs	10,329	12,274	13,716	14,645	16,987	19,360	21,214
% of international students over total students	7,49%	9,13%	10,04%	10,64%	12,02%	13,29%	14,41%

Source: Direção Geral de Estatísticas da Educação e Ciência (DGEEC) <https://www.dgeec.mec.pt/np4/EstatVagasInsc/>.

private landlords through housing of multiple occupation. This was in fact mentioned in Worx's report (2013), describing this supply as being provided by unprofessional, non-regular actors who were accused of 'unfair competition'. Notwithstanding, the report (Worx 2013) suggested the need of a search engine to assure the concentration of this dispersed offer, and in this sense, the report announced the creation of Uniplaces. In fact, the foreword to the report was authored by Miguel de Santo Amaro, CEO of Uniplaces. He presented the new digital platform and stated that the aim was to organize the existing supply, thus giving security and adding value to both students and landlords in the booking process.

METHODS

We use data from two complementary research projects. The first one spanned between 2013 and 2021 and aimed at exploring the motivations, lifestyles and impact of international students in Lisbon. We conducted more than 70 interviews with students and staff from student associations. This set of interviews further focused on how students access housing and their experiences within the housing market. We supplemented this information with analyses of reports on student housing published by Uniplaces (2017, 2018) and by real estate consultancy companies (Worx 2013; JLL & Uniplaces 2017, 2019; Savills 2020). All the reports used to be available online, however, some have now been removed. The second project was undertaken between 2018 and 2022 and explored digital platforms and housing markets in Lisbon, with a particular emphasis on Airbnb and STRs. We conducted 42 interviews with landlords, property managers and real estate consultancy companies including JLL and CBRE. Interviews focused on the role of digital platforms in channelling investment in housing markets. An important finding was how Airbnb property managers rely on digital technology for management and distribution, and how their software was linked to both Airbnb and Uniplaces. We did further ethnographic work with local communities

and examined their experiences after the sudden growth of tourists and other transnational mobile populations, including international students.

In 2021, informal conversations between members of both projects concluded that we had complementary material on the same issue, that is, how a digital platform such as Uniplaces was restructuring student housing. It was in this moment that we decided to further explore the topic. The first project provided longitudinal data about demand and student housing market transformations. For instance, using interviews from 2013 allowed us to understand the structure of the student housing market and the views of the actors involved in the sector before the growth of Uniplaces. The second project had data about supply, industry players and the ecosystem of digital platforms operating in Lisbon. As fieldwork of this second project ended in 2022, we had the opportunity to ask landlords and property managers about their experiences with Uniplaces. In particular, the COVID-19 pandemic reinforced the multi-channel distribution strategy, and, in this strategy, Uniplaces was a key platform. Finally, we explored the functionality of the Uniplaces website as well as its evolution. To this end, we used the Internet Archive Wayback Machine, which is an online source to track the history of the internet (Helmond *et al.* 2019). An important limitation is that we were not able to interview Uniplaces. We contacted them by E-mail several times without success. Another limitation is that we could not scrape data from the Uniplaces website. We had the intention to explore the Uniplaces supply in more detail and we contacted companies offering scraped data from digital platforms such as Airbnb and VRBO, but they only focus on vacation rentals.

FINDINGS

Classified ads and the role of student associations as housing intermediaries – During our fieldwork we found that in 2013 most international students rented rooms supplied by private landlords in HMO. These rooms were advertised as classified ads in different online and

offline media. For instance, some landlords left sheets of paper on the noticeboards of university halls and corridors. Other property owners used OLX, the Dutch website for classified ads which is prominent in Portugal. Regarding online media, Facebook was probably the most relevant player. Different actors announced rooms in student forums on Facebook, from private landlords and student associations, to students from the last semester selling their belongings before returning home. We noticed that from June to October, and from January to March (the months around the student's arrival), these online forums were almost entirely used to publicize and search for accommodation.

The role of student associations as intermediaries between students and property owners was key, and they had an important portfolio of rooms to rent. Formed by Portuguese students who recently returned from their experiences abroad, student associations are allegedly non-profit organizations dedicated to helping, assisting, and entertaining foreign students during their stay in Lisbon. With students being increasingly perceived as valuable consumers for the leisure industry, these associations compete with each other to attract students, organizing events in partnership with the night-life industry, as in many other university cities (Chatterton 2010). During our fieldwork there were five active student associations organizing a range of leisure events and meetings. Consequently, recently arrived international students would undoubtedly meet members of some of these organizations at an event, or when visiting the 'Erasmus Corner', an iconic spot for international students in the most popular night-life area (Malet Calvo *et al.* 2017). In terms of the inventory of rooms they had, according to the leaders of these organizations there were no economic agreements with property owners: the associations were just playing their role in helping students. In exchange for this service, the student associations would develop a stronger rapport with the students who found a room through them, therefore students were more likely to keep frequenting their events (the main source of income for the associations). Interestingly, some members of these student associations abandoned their

organizations to become professional players in the housing sector (this is the case of companies such as Erasmus Palace or Place to Stay) or even transformed the entire organization into a student residence company (this is the case of EOL – Erasmus Organization Lisboa).

The point is that the websites of these associations, and the Facebook forums which they promoted, were probably the most usual way for international students to search for accommodation. As intermediaries they advertised rooms, and then students had to contact landlords to make an agreement. Some international students contacted landlords through student associations' online environments before travelling to Lisbon. Others, who preferred to wait and visit the houses in person after their arrival, got access to the same listings to find accommodation when visiting student associations' headquarters. Student associations were simply a forum for publishing information, but students had to contact landlords and make bookings and transactions with them directly. Therefore, it was a multi-step process.

In the case of Facebook, it functions as an aggregator of student housing offers, similar to other platforms for classified ads such as OLX. Facebook is considered a programmable platform as other business can be integrated on top of it (Helmond 2015; Helmond *et al.* 2019), but renters cannot book a room using Facebook functionalities. In this sense, it is a forum that makes information available about a product but not a distribution channel as it does not allow consumers to make a reservation and pay for the required product. In the rental market, the simplification of this multi-step process was introduced by Airbnb through a mechanism that allows the customer to purchase the product. This business model was reproduced by Uniplaces, as we show below.

Uniplaces and a landscape of platforms – Uniplaces was launched in Lisbon in 2013 by three young entrepreneurs from Slovenia, the United Kingdom and Portugal. The company benefited from the support of the city council's Economy and Innovation Department (E&ID) through the Start-

up Lisbon infrastructure. From 2012 to 2015 they raised more than €30 million in different rounds of financing from venture capital investors. From then on, Uniplaces started to appear in international rankings and specialized journals on business and technology, being awarded as one of the best European companies for internships; and finally, including its co-founder Miguel Amaro in the list '30 Under 30 Europe: Technology' as one of the most promising technology entrepreneurs (Forbes 2017). Apart from being backed by capital investors specialized in housing (Alex Cherterman, from the UK platform Zoopla, for instance), in 2015, Uniplaces additionally recruited as manager and investor the former vice-president of Airbnb.

As a platform connecting supply and demand in a simple way, Uniplaces has imitated the Airbnb working model. The platform provides landlords with an online tool to create their listings, under the slogan, 'Create your listing for free. Earn money every month', as it is described on the Uniplaces website. It also offers professional photography for free and a dashboard for users to manage the properties. Uniplaces uses a dynamic price algorithm to suggest rental prices according to demand. In Lisbon, the minimum stay is usually 1 month. For rentals less than 30 days, landlords need a STR licence. For tenants, the platform emphasizes how it simplifies the traditional multi-step process when searching rooms: 'We're here to make your life easier. So, forget all about local guarantors, proof of income, annoying calls, selection processes and in-person viewings. With Uniplaces, you can save time by discovering unique homes [by] smoothly booking them online, from anywhere in the world'. As we suggested, the key mechanism is the payment system, where users pay first and then Uniplaces later transfers the rent to landlords. After each booking, the platform takes an 8 per cent commission, which is assumed 4 per cent by the landlord and 4 per cent by the tenant. Uniplaces further offers a rating system in which tenants can leave opinions about landlords. In sum, this digital infrastructure generates trust among users and simplifies and formalizes the previously separated processes

and transactions, including the mediation of third-party players such as student associations and Facebook forums. Our interviews with international students confirm that Uniplaces is a 'convenient' solution as tenants feel safer using the platform rather than contacting landlords and making transactions with them. This is also because cases of housing scams circulate through student forums. However, despite the feeling of safety provided by the platform regarding the booking and payment processes, landlord abuses and rooms without livability conditions continue to exist (Malet Calvo 2021).

In terms of inventory, in June 2015, Uniplaces offered 2,098 listings in Lisbon and this offer steadily grew to a pick of 5,688 in July 2021. In a report published by Uniplaces in 2017, it is stated that the demand in Lisbon grew 183 per cent from 2015 to 2016, with an increase in the offer of available properties of only 33 per cent (Jornal de Negócios 2017). The report highlights that the main market in the country is Lisbon, in which 83 per cent of guests were international students who stay in the city an average of 5 months. In another report (Uniplaces 2018), the platform describes the geography of the supply and confirms that international students stay in central areas and close to faculties, but without a clear cluster. In terms of prices, in 2016 the average monthly rent for a room offered by Uniplaces in Lisbon was €443, while in 2018, and considering both rooms and studio flats, the average monthly rent in Lisbon reached €620 (JLL & Uniplaces 2019). The platform (Uniplaces 2017) highlights that in 2016 foreign students were willing to pay more (420€) than national ones (395€); foreign students predominantly being British and Dutch students, the ones paying for the most expensive accommodations. In addition, disproportion between Portuguese and international students using Uniplaces widened further, from 77 per cent (2016) to 87.9 per cent (2019), with only 12.1 per cent of users being Portuguese students (JLL & Uniplaces 2019). It is worth noting that in 2016 the minimum monthly salary in Portugal was €530 and the average salary was €868. Therefore, to pay €443 for a student room would have likely been unaffordable for a large part of the Portuguese population. The

supply of Uniplaces therefore caters to transnational consumers who are willing to pay higher rents.

It is important to disclose how Uniplaces works in conjunction with other short- and mid-term rental platforms. In pre-pandemic times, interviews with landlords and property managers reveal that the typical strategy had been to rent to tourists during the summer season using Airbnb and then to move the listings to the international student market during the academic period using Uniplaces. We found that this trend exists at least from 2015. In fact, a survey found that 38 per cent of Uniplaces landlords prefer to rent only to students, while 60 per cent prefer to alternate between students and tourists depending on the season (Diário de Notícias 2019). To synchronize listings, property managers told us that they approached Uniplaces, and the company provided the API so that channel managers could plug in.

This synchronization of listings among platforms had been particularly relevant during the Covid-19 pandemic. First, the pandemic consolidated other MTR platforms, which received significant support from venture capital investors (Rental Scale-Up 2021). In Lisbon, for instance, Spotahome strengthened its presence and reached more than 4,000 listings. Indeed, Airbnb (2021) declared that MTRs were their fastest-growing category and that 25 per cent of bookings were for rentals longer than a month. Second, as tourism halted, all STR management companies that we interviewed indicated that they managed to secure

approximately 50 per cent occupancy rates by moving their listings to MTR platforms, of which Uniplaces was a central one (Fig. 1). In fact, during the first year of the pandemic, the inventory of Uniplaces grew by 1,600 units. Figure 1 shows that for Hostmaker (a property manager), rental platforms are considered 'Channel Partners'. As such, their API was integrated with more than 20 platforms, the image in Figure 1 displays the main ones, such as Airbnb, Booking.com, Uniplaces, Spotahome and indeed Idealista and Zoopla, which are considered platforms for long-term rentals.

The view of property owners and managers helps us to understand the growth of the MTR market. There is a consensus among the interviews that three factors have been key. First, there is an increased demand for monthly rentals. International students are a central group of consumers in this sense, however, the pandemic also reinforced other mobile lifestyles such as digital nomads and remote workers. Uniplaces for instance readapted its marketing from being a platform for university students to being the 'marketplace of unique places for students, young workers, digital nomads, travellers, or families. We are the fastest-growing international website for booking mid and long-term rentals,' as stated on their website. Second, the availability of several platforms allows the distribution of portfolios in a multi-channel environment. As a property manager stated, 'we use tech to adapt the supply to demand'. Finally, the result is a flexible rental market that allows property owners to adjust both prices and length of letting to

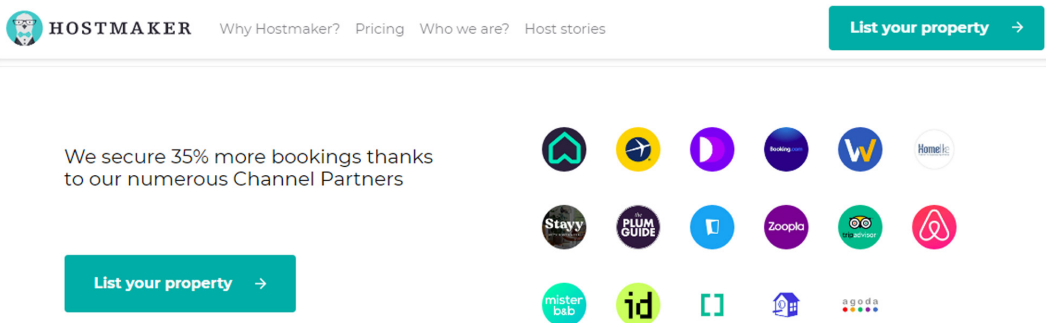


Figure 1. Hostmaker multi-channel distribution strategy in April 2020. In 2020 Hostmaker exited the market in Lisbon and its inventory was acquired by Houst (www.houst.com). Source: Screenshot of the Hostmaker Lisbon website in April 2020.

existing demand. Due to the ecosystem of platforms, landlords can both speculate with prices and move their listings to other forms of rentals during times when those forms are more profitable. Furthermore, in Portugal tenancy agreements should be for 1 year at least, and the rental law gives tenants the option to automatically renew the contract for a maximum period of 3 years. Regarding this, a property owner told us:

We do not want tenants. We do monthly rentals for a maximum of 11 months. We do not have a short-term rental license so we cannot go to Airbnb. But nowadays you have platforms for mid-term rentals, and this is the market which is growing faster.

CONCLUDING REMARKS

In this paper we showed how the business model of a platform such as Uniplaces succeeded in reorganizing the supply of housing for international students in Lisbon. By providing a booking system and simplifying the search for distant student rooms, this platform replaced a previously scattered market where properties were advertised on listing sites and Facebook groups. From a business perspective, Uniplaces followed the Airbnb model in terms of providing a digital infrastructure that easily connects supply and demand. Furthermore, for distant consumers – international students in this case – the platform streamlines the search for accommodation, replacing both a former multi-step process and guaranteeing a secure transaction. Platformization in this sense does not only mean that the local housing market is opened for global demand. Additionally, the housing market intermediation of platforms is complemented with the option of doing transactions through them. By doing this, platforms have simplified previously informal housing distribution arrangements. We further highlighted how Uniplaces should be seen within an ecosystem of platforms. The accommodation industry is now formed by a myriad of market actors and distribution channels – platforms – of which Airbnb and Uniplaces are only two examples. The short- and mid-term rental market is not simply about platforms connecting individual buyers and sellers, but

about property owners and managers which connect their software to different digital platforms to guarantee high occupancy rates. In this regard, we agree with van Dijck (2021) and van Dijck *et al.* (2019) that we need to see how platforms reshape markets ‘in conjunction’.

This landscape of platforms is key to understanding both the rise of mid-term rentals and the impact on local housing markets. We have seen how channel managers are not only connected to the platforms used in the hospitality industry, but to a myriad of short- and mid-term rental platforms. In this sense, we are experiencing the transition of the STR market towards a flexible rental sector which combines different products and lengths of stay. In a place such as Lisbon, we suggest that the rise of this market will further weaken the position of tenants and will strengthen the current process of transnational gentrification. This is supported by the fact that the demand of mobile populations seeking for tailored rental products has grown since the pandemic (Colomb & Gallent 2022); indeed, several places, including Portugal, have recently approved visas for digital nomads. Additionally, the platformization of rental products makes residential real estate markets increasingly efficient for property owners as they can now list their properties online and reach this global demand. Within the context of economies relying on tourism, the attraction of an extra-local demand has been seen by developers to be necessary to stimulate local property markets, and, subsequently, the new landscape of digital platforms takes this to another level. Authors have also shown that, due to the globalization of housing demand, prices tend to decouple from local purchasing capacity (DeVerteuil & Manley 2017). Furthermore, rent prices on these platforms tend to be high because consumers are willing to pay expensive rents for short- and mid-term stays. López-Gay *et al.* (2021) illustrate how transient gentrifiers ‘do not mind’ paying high rents as these payments are only for a few months. In conclusion, the rise of MTRs will further strengthen a process of gentrification in which the private rental market increasingly caters for transnational and transient populations.

Finally, it is important to note that the use of MTR platforms bypasses existing rental laws,

including STR regulations. Exploring a platform such as Uber, Schor (2020) notes how it reduces production costs because of its ability to bypass regulations, particularly labour arrangements, and tax contributions; this is also the case with the MTR sector. On the one hand, in cities where STR licences are no longer available due to constringency measures (Colomb & Moreira de Souza 2023), MTRs allow property owners to operate without a STR licence, which usually allows owners to rent their properties for less than a month. On the other hand, we have seen how, by using MTR platforms, property owners avoid making long-term contracts. This is because landlords view the traditional rental market as 'too rigid' for the simple fact of having long-term tenants. By way of contrast, MTRs are products which are as flexible as STRs in the sense that landlords have absolute control over the asset: they can obtain profits from rental income and, at the same time, sell the property, use it or directly abandon the market when they will. Also, the high turnover of renters allows landlords to constantly speculate with rental prices. In sum, as rentals between 1 and 11 months long skip all existing regulations, they give landlords further incentives to profit from this market. Our interviews reveal that this is the market that is expanding the most and is the most attractive for investors. This signals the need for regulations to tackle this issue as it has the potential to increase the vulnerability of tenants as never before.

While research on Airbnb has been prolific, this paper signals the need to broaden the spectrum of the platformization of rental markets. Further research is needed about how other platforms reshape other market segments in different places.

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Endnote

¹Study-abroad students (or Credit Mobility students) are those students earning credits for completing their degrees at their 'home' university by studying abroad for a short-to-medium period of time in a 'host' university. Full-time international students (or Degree Mobility students) are those who crossed a border to enrol in a Degree Program with the intention to complete it entirely.

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