

# Till Distance Keeps Us Apart - Does The Future Of Co-Living Look Bright After The Pandemic?

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## ABSTRACT

The paper studies the entry of the co-living industry in India and its growth over the span of five years. It determines the consumer's intentions to opt for a co-living Space post-pandemic and the factors considered essential by them for choosing co-living in the future. The study recognizes the objective of the co-living brands to further business in the future. It helps in understanding the preference of Indian millennials to accept co-living Spaces over rented accommodation. The paper uses a mixed methodology, using qualitative interviews to design the quantitative questionnaire. This is an exploratory study to find how the covid-19 pandemic has affected a nascent co-living industry in India and compare among the various players in the industry about the future course of action. Residents have a slightly negative response towards this venture, as they are still under the mind-set that co-living will be unable to deliver the modern renting experience any different from the traditional PG system. While the company officials of the various co-living brands are having a mixed review of the pandemic but with a general feeling of a complete revival of the business in the future. The study implies that after the pandemic people would prefer organized rental living such as co-living spaces to regular PGs or rented flats due to the need for a more luxurious, comfortable, well managed, and hygienic lifestyle of living

## Keywords

Co-living, Pandemic, Residents, Indian Millennials, Qualitative Interview, Questionnaire, Co-living Operators.

Article Received: 10 August 2020, Revised: 25 October 2020, Accepted: 18 November 2020

## Introduction

### A. Evolution of co-living

Co-living is a concept evolved from co-housing in Denmark during the mid-1900s [3]. Co-housing is based on three fundamentals - Collaborative, Communal, and Collective. Collaborative is interpreted as a collaboration among residents, Communal is community living based on the designs of the houses for shared living, and Collective is the shared services and objectives among residents [4]. A similar concept existed in Sweden and Netherlands in the 1970s [5]. Thus co-living is nothing but reconceptualizing the idea of co-housing of the 1960s [6]. It is based upon communal values and shared objectives, compromising some personal freedom, to build common needs of the residents living together [7].

Medieval villages, monks in monasteries, the hippie movement of the 70s was built around the idea of co-living [6]. This practice then started growing and disseminating across Europe. Whereas in the US, the concept of co-living started highlighting in the news articles in the year 2011-2012 which was the major time when Silicon Valley rose in the US, leading to a surge in the demand for tech workers [8]. With the ever-increasing global population, resources and space both have reached the limit. In the context of the housing sector, society is facing new difficulties due to an imbalance in the supply and demand chain [9]. Therefore, people are accepting the concept of a shared economy as the only way of survival in this overpopulated world. They have realized the benefits of sharing the products and even various services instead of possessing them [10].

Sharing accommodation is an emerging term as co-living, throughout the world but with mixed definitions and models depending on the purpose and lifestyle of the citizens of that country [10]. In addition, in the year 2015, google searching for co-living started shooting up after which it prevailed and bloomed in the US [9]. Around this time, co-living in India also came into prominence, which today has become a multi-billion-dollar industry [11].

### B. Co-living across globe

According to the Global Co-living Report, China is the biggest player in the co-living industry in the world. Although the concept came from European countries, China imbibed the culture of co-living rapidly due to its huge population and critical affordability issue [12]. There are over 50 co-living operators in China alone. Among them, the market leaders are Ziroom and Xiangyu, other challengers in the industry are You+, Danke, Inboyu, QK365, and others [12]. The USA, always ahead in innovation and new age businesses, has received a funding of \$2.2 billion till the year 2018 [11]. It has over 50 operators with Bungalow, Ollie, Common, and X Social Communities being some of the players. The growth of co-living in Europe is far slower than Asia but it shows huge expansion in the coming years [11]. The capital city of the UK, London, is showing a huge growth profile due to the increasing demand. The collective, one of the biggest ventures in the UK, is also expanding in the US and Germany [13].

Other than China and the USA, other countries in South-East Asia also show growing profiles in the co-living venture, which is aligned to the global definition of co-

living spaces. Singapore has been leading in terms of funding, followed by Indonesia and Thailand [12]. Hmlet, in SE Asia, has its locations across Singapore, Hong Kong, Tokyo, and Sydney. The Middle East, Australia, and New Zealand are also emerging in this venture [12]. Overall, we see that there is a potential of rapid growth in densely populated urban areas globally and it is looking forward to thriving in the coming years.

### C. Research gap

The organized co-living companies started venturing into the Indian rental space around the year 2015. Since then it has rapidly expanded, growing into a market size of \$6.67 billion [11]. Due to its recent entrance in the industry, it hasn't been explored in terms of research. In the Indian context, there is no relevant study available whereas countries such as the USA, China, the UK, Germany, and many more have done a good measure of research in this sector. This iota of research provides certain knowledge on the statistics of co-living to understand the development of the industry over the years. These countries depict a co-living definition very different from that of India. This gap in research has prompted further study, attempting to understand the current market, the models developed to cater to the needs of the customers as well as the future prospects in India.

In the Indian scenario of rental system, as elaborated by Arjun Kumar (2016), there are three types of rental housing demands. The first is where households move permanently in a place and rent the place instead of buying due to affordability constraint, second is frequent migrants who are constantly moving for the purpose of employment/education and lastly are the rental households provided by the employers such as the government, cooperates and companies to their employees. In India, research on rental housing has mainly been focussed on slum dwellers and low-income migrants [14]. Thus, this paper tries to identify renting needs of residents of the second type of rental housing demands - constantly migrating employees/students and justifies co-living as an increasing form of organized rental accommodation to suffice the much rising need of rented spaces.

### D. Co-living in india

In India, the fuel for the rising demand of co-living spaces comes from the interests of Indian millennials, who are looking forward to migrating into bigger cities because of fresh job opportunities for them to grow and a way for them to expand their social network [15]. India has a demand of 4.19 million beds, market size of \$6.67 billion, and funding of \$3.42 billion [11]. India has over 60 co-living operators, NestAway and Zolo Stays being the market leader [12], with CoHo, Colive, FF21, Your-Space, RentMyStay, FLO, and many others as challengers.

The biggest consumers are students and young working professionals between the age of 18-35 and an average income bracket of 3L-10L per annum of working professionals [16]. Although the concept of co-living is not new, as it used to exist in the 60s in various countries, still the concept and driving force of co-living in India is new

and very different from other countries. This nascent model is here to stay and expand by catering to India's migrating millennial population of 49.7 million [17].

Due to globalization and the opening of the market for foreign players in India, job prospects opened and people started migrating. In recent years, India has seen an infusion of westernized values into traditional Indian values. There has been a transformation not only in the socio-cultural factors but also in the economic standards, leading to a shift from the collectivistic Indian society to an individualistic western society [18]. The millennials move out of their parents' home to be independent even though their family is living in the same city. People are adopting the culture of the gig economy where they constantly change jobs in a short duration of time [19]. Therefore, people today are constantly traveling and relocating, which is why they want to cut back the costs of purchasing or renting the furniture and other household stuff to save themselves from the hassle of setting up the entire living space in rented flats [20]. Due to these shortcomings of PGs and rented flats, many young entrepreneurs were inspired to start a well-managed, technical-friendly, and organized rental system in India, co-living. The solution of being able to move into a new house in an asset-light approach is portrayed by co-living spaces in India. The idea of the comfort sold more rather than the community experience gained [20].

The prominent features of co-living spaces are their flexibility in the duration of stay, organized, fully furnished, and serviced accommodations. Residents have to pay a security deposit for a period of 1-3 months in comparison to other rental accommodations, which usually take a deposit of 3-6 months [21]. They even have the comfort of moving out of the property by giving a prior 1-2 months evacuation notice whereas in flats they need to get into a legal contract of usually 11 months [6]. Its tech-driven format has helped ease communication between the operators and residents in this digitally revolutionized world. The residents can look at the location and amenities provided by the operators online and book for a visit [22]. Online payments of rent, providing feedback, raising a complaint, and asking for services via mobile apps have made a hassle-free arrangement for the residents [23].

Therefore, these characteristics of co-living spaces and easy on boarding at an affordable price spoke to the people. To expand the co-living industry, tier 1 cities were preferred such as Bangalore, Delhi-NCR, Mumbai, Pune, Hyderabad, and Chennai, where they can cater to the huge population of nomadic young millennials [1]. Many buildings in prime locations such as employment hubs like IT parks, city centres, special economic zones, or near universities and colleges, were leased or owned and built-to-suit for co-living spaces [6].

E. Co-living stepping-up during the hour of difficulty  
On December 31, the novel coronavirus was first identified in Wuhan after which it gradually spread outside China with India reporting its first case on January 30. With its rapid advancement, covid-19 was finally characterized as a pandemic on March 11 [24]. Pandemic has collapsed the economy worldwide, causing a global recession [25]. Most of the business sectors have been greatly affected, with the co-living industry also taking a hit. Initially, over the years, the industry was growing exponentially, but due to the

pandemic, the growth has stagnated. The cause of the above is a huge number of evacuation of the residents and simultaneous decline in the rate of occupancy of new tenants due to the nation-wide lockdown in India from March 22-May 31 [26]. This situation caused a panic throughout the nation as only essential services were granted permission, which led to a massive migration of people back to their hometowns. Most Companies were out of business for the time period [27] or arranged work from home for their employees [28].

Businesses started modifying their models to survive the blow, similarly, co-living industry has well responded to the growing crisis by improving their spaces according to the need of the hour. During this difficult time, these companies have shown their true devotion towards their customers by not increasing the rent or by providing rent concessions [29]. Hygiene and sanitation of the place are being well looked after, including the well-being of the residents during these precarious times. Their organized management and cleanliness are now making the difference and helping them stand out from the unkept PG systems [30]. With all the assistance provided to the residents (in terms of facilitating delivery services, maintaining optimal hygiene, providing concierge to avoid social contact, looking after resident's groceries and other essential commodities), co-living has established itself as the desirable way of living in the future [31].

## Research Methodology

For the purpose of primary data collection, two methods were involved - Qualitative Interview and Quantitative Questionnaire. Qualitative interview was further sub-categorized into two - Interview of company officials and co-living residents.

**TABLE I. INTERVIEW DETAILS OF COMPANY OFFICIALS**

Company	Role	Type	Length
Zolo Stays	CEO and co-Founder	Google Meet	20 min
Zolo Stays	Senior Business Development Executive	Google Meet	30 min
NestAway	Co-Founder	Telephonic	40 min
Tribe Student Accommodation	Director of Marketing and CTO	Google Meet	25 min
Your-space	Head of Growth and Business Development	Google Meet	20 min
FF21	Co-Founder	Telephonic	30 min
RentMyStay	CEO and Founder	Telephonic	35 min
CoHo	Associate Vice-President	Telephonic	30 min
CoHo	Marketing Specialist	Written Interview	-
FLO	Business Development Executive	Telephonic	35 min
Colive	City Manager	Telephonic	20 min
Covie	Sales Lead	Written Interview	-

The first data collection method involves the preparation of a discussion guide for the company officials to get detailed information about various aspects of co-living - the setting up of the business and its working, business in the current situation, their customer service during the pandemic and the plausible future of the business. Around 20 co-living operators were analysed which was known through secondary market research as well as from friends and colleagues living in the co-living spaces. Out of the 20 co-living operators who were connected via LinkedIn, 12 officials, including the CEOs and founders, of the 10 different co-living companies encompassing all the different models of co-living spaces, responded positively for the interview. The interviews conducted, both telephonic or video conferencing and written interviews in the month of June were documented for further analysis. Apart from answering the interview questions, many company officials imparted various other insights for a better understanding of their company furthermore the co-living industry.

Another set of interviews were conducted for the residents of co-living spaces, primarily to get an idea of the first-hand experience from the consumer point of view. This helped in gaining relevant insights and thus designing the quantitative questionnaire for the public. The sample size for the interview was 11. The telephonic interviews were recorded to help compose the right set of questions. The sample size was enough for exploring the broader cultural context of co-living, understanding the future needs of the residents, and further helping in drafting the questionnaire.

The data collected from the qualitative interview of residents assisted in compiling the questionnaire. The questionnaire was designed to learn the preferences and opinions of the Indian millennials on various aspects of co-living before, during, and after the pandemic. The design helped in differentiating the demographics between co-living residents and non-Co-living residents, identifying the experience of co-living residents, and the changes that the residents would like the co-living spaces to adopt post stabilization of the current situation. The method of sampling chosen was purposive sampling, as the questionnaire was floated to a population that mostly had work experience or students who had to leave their home. This received 250 responses, out of which 235 responses were used for analysing and understanding the notion of co-living among people. The paper then presents the difference of opinion of the public towards co-living spaces, before and after the pandemic, thereby trying to predict the future growth of the business.

The above method was preferred as it helps to directly assess the consumer's attitude, perception, and intention towards co-living spaces. The survey used a combination of customer satisfaction measurements- Customer Satisfaction Score (CSAT) and Customer Effort Score (CES). CES helps to indicate the performance in handling customer issues and CSAT gives a more flexible customer satisfaction metric [32]. These customer satisfaction measurements aided in understanding precisely the 235 responses from the questionnaire floated. The 10 different co-living businesses chosen for the interview are the major players of the industry in India featuring every model of co-living;

therefore, the sample size also justifies the first data collection technique to analyse the data.

A discriminant analysis was performed to determine how various factors would have an influence on the future probability of people living in co-living spaces. Post pandemic, whether people are comfortable living in co-living or not, was the dependent variable, which was a categorical data. Six factors that may have an influence on the dependent variable were chosen namely, proximity to work, duration of stay, amenities provided, brand name, rent, and recommendation of a friend/colleague. All the independent variables were metric data. The following hypotheses were developed for each factor:

H01: There is no significant influence of proximity to work on the dependent variable.

Ha1: There is a significant influence of proximity to work on the dependent variable.

H02: There is no significant influence of duration of stay on the dependent variable.

Ha2: There is a significant influence of duration of stay on the dependent variable.

H03: There is no significant influence of amenities provided on the dependent variable.

Ha3: There is a significant influence of amenities provided on the dependent variable.

H04: There is no significant influence of brand name on the dependent variable.

Ha4: There is a significant influence of brand name on the dependent variable.

H05: There is no significant influence of rent on the dependent variable.

Ha5: There is a significant influence of rent on the dependent variable.

H06: There is no significant influence of recommendation of a friend/colleague on the dependent variable.

Ha6: There is a significant influence of recommendation of a friend/colleague on the dependent variable.

### Results And Discussion

The findings from the interviews of company officials is presented in this section. The interviews from present/former residents have helped get some insight for the preparation of the questionnaire.

#### A. Findings from company interviews

The information collected from 12 Company officials of 10 different Companies have been sub-categorized into four different themes and discussed henceforth. An overview of the co-living operators has been mentioned in Table 2.

**TABLE II. BASIC DETAILS OF CO-LIVING OPERATORS**

Comp any Name	Year of Oper ation	Footpri nt	No of Tenants /Beds	Co-Living Type	Rent
Nest Away	2015	13	80,000 + tenants	Private Entrepreneurs	Varies with Location

Zolo Stays	2015	10	32,000 + tenants	Private Entrepreneurs	Varies with Location
Rent MyStay	2014	3	4000+ beds	Private Entrepreneurs	12K for a studio, 18K for 1BHK & 21-24K for a 2BHK
CoHo	2015	4	3000+ beds	Sharing Economy Innovators	10 – 12K per person
Covie	2020	4	4000+ beds	Private Entrepreneurs	Undisclosed
FF21	2017	1	1300+ beds	Purpose-based Communities	10K per person in twin sharing
Your-Space	2016	8	5000+ tenants	Private Entrepreneurs	16-17K twin sharing
Tribe Student Accommodation	2018	2	500+ beds	Private Entrepreneurs	23-33K month depending on the location and room type
FLO	2019	1	225 beds	Real Estate Developers	18K double sharing, 15K triple sharing per person
Colive	2016	3	26000+ beds	Sharing Economy Innovators	8.5K per person in twin sharing

a) Understanding the definition of Co-living: The co-living definition in India is quite diverse as every operator has a different notion and motivations for starting co-living, based on various shortcomings the current renters are facing. In this context, the Sales Lead of Covie Venture stated:

“This business of co-living seemed more realistic and practically viable as it was genuinely resolving an actual problem of quality long-term accommodation for migrant professionals and students. We felt that people were frustrated with the current options of local PGs and that is how the business of co-living became a success by filling that gap.”

While the CEO of Zolo Stays described his inspiration for starting co-living as:

“We are reimagining the PG-like industry. The PG industry has been here for ages. Therefore, the idea came from the broken condition of the PG industry such as hygiene, space, quality, everything is missing and that’s why we thought that we can do a good job here.”

Another prospect of co-living is its advantage for short-term renters, ranging from 1-2 months to 1-2 years, who did not want to get into the hassle of furnishing where they eventually will leave the space. In relation to this, the CEO and Founder of RentMyStay had an interesting insight to share:

“We pursued co-living in 2014 with the Airbnb concept. My co-founder and I... wanted to take temporary accommodation for work and finding the house for 1-2 months is very difficult for anyone. Whereas, when we were staying abroad the format of renting for a flexible duration or short term was very common. Therefore, we derived the idea from there. Nobody will give you a house for 3 months and you cannot stay in hotels for 3 months. We provide a complete home experience; it is an all ready-to-occupy house.”

There is yet another defining category of co-living where the entire project is built keeping a particular target group at focus, students, as student housing. One particular operator of student housing has refined the target group in students even more, which is explained by the Director of Marketing and CTO of Tribe as:

“We wanted to only build high-end student housing, so we were looking at the cream crowd, i.e. the top 10% of the student accommodation industry, we believed that there was a market for a top-quality stay. One of the very big reasons for this is that we wanted to specialize in one space. So, we have built student housing where you have everything that a student requires from study spaces to discussion areas, entertainment zones, events throughout the year for students, stuff like that which was a complete student experience.”

b) Target Group: While conducting interviews, two major target segments emerged that was common with every operator, namely students and young working professionals. The age bracket identified lie in the range of 18-35. While the major business comes from these two target groups, the co-Founder of NestAway enumerates a number of other target groups as stated:

“One surprising segment that came out for us was a whole bunch of people who had taken the place for doing start-ups. Therefore, it was sort of a work-office as well as a living kind of setting. We also have a traveller segment where the businesspersons living in tier 2 cities, frequently need to travel to Bangalore, Mumbai, or Delhi. Therefore, what they do is they rent out a room, which turns out to be much cheaper than using Hotel every time they come.”

Many operators have constrained themselves to a narrow target group, such as Your-Space and Tribe student accommodation which only operates in student housing. While companies like FF21, allow only working professionals and not students.

c) Change in Business Dynamics due to Pandemic: In this section, the impact of the pandemic on the business is analysed. In this unfathomable time, when only essential services were allowed to run during the lockdown it was a mammoth task to keep the co-living business running. Yet the business was affected and slowed down. The Co-Founder of FF21 stated the effects on the business as such: There has been a slowdown as many people went back home. Even today, we have 50% occupancy. Financially we were okay, but getting new customers currently is a bit difficult. Some people have given checkout notice. So, some

of the beds are empty right now. Priority during these times is to keep the people who are in the building safe.

Some businesses were affected more than others were. Student housing has been affected the most. As the entire education sector has been put on hold after lockdown, tentatively till August, student accommodation has completely been wiped out. The Head of Growth and Business Development of Your-Space states:

The bulk of our hostels are running at 4-5% occupancy. We typically operate at about 90% occupancy but the students have gone home as the colleges have closed down. So low occupancy right now has led to a problem of collections but business, as usual, is expected to return because universities are expected to open in August and September.

The operators are giving prior importance to the safety of the residents by following the guidelines set by the government. They believe more in customer satisfaction rather than in keeping the profits up. The Co-Founder of FF21 describes how the co-living spaces are being looked after as of now:

Priority during these times is to keep the people who are in the building safe. Anybody entering the building who has gone out for work or other purposes, at the main door, there is a person who has to take their temperature and also the Arogya Setu app to check if that person is still safe or not. We have put up sanitization booths, where they have to stand inside and get sanitized and then enter the building.

Apart from safety and hygiene, residents were also helped out in other different aspects during the time of difficulty. The Business Development Executive of FLO as such stated this:

For the provision of groceries in apartments, we are calling D-Mart on a particular day and they will put up the stall, maintaining a social distance so the residents can purchase. We also brought the ATM for one day for them to take the cash out.

Many co-living operators are also offering some percent of rent concession for the ones who are not living in the place but still having the space occupied in their name. Thus, co-living spaces as one of the many businesses being affected due to pandemic have stepped up to the job at hand and have proved their allegiance towards their customers.

d) Future Course of Industry: The future, which was expected to grow into a \$14 billion industry by 2025, is now unclear [33]. Overall, once the pandemic resides, it is expected to grow eventually, as stated by the Associate Vice-President of CoHo:

The growth has been stagnated for the last 2-3 months but it has started to come back with the revival to take place in the next 1 or 2 years. I feel with the period, the revival will increase drastically. As an industry it will keep on growing, it might be slower growth in the first few months but then it will normalize and will even be better.

The Director of Marketing and CTO of Tribe puts his opinion in words as stated below:

We are going to be very bullish especially now that tourism has taken such a big hit, unorganized student housing companies are definitely going to be shut down and consolidated into a more professionally run student housing companies. Therefore, we are looking to expand as much as possible in the next 1-1.5 years as this is the time to capitalize on this and things look great to us. People will

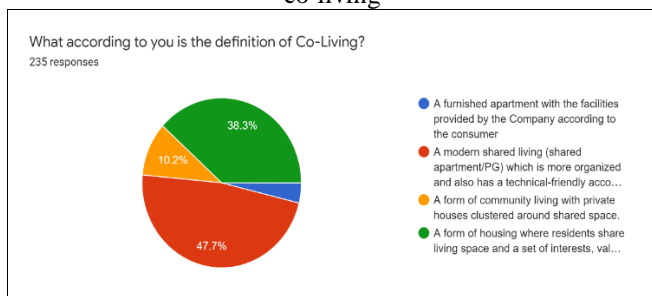
definitely be moving towards professionally run purpose-built student housing and co-living.

## B. Analysis of the questionnaire survey

A questionnaire was floated around to get the responses from the consumers. A total of 250 responses were collected. After filtering the irrelevant responses, 235 responses were remaining. The 235 responses were further categorized into two sets, Set A of 74 responses who have lived or would be living in a co-living space and Set-B consisted of all the 235 responses. Of all the responses, 196 people have stayed outside their home for the purpose of job/study, of which only 73 have lived in co-living spaces. This sample shows that the companies are missing out on a huge chunk of potential clients

a) **Demography of Respondents:** Age and income bracket were the factors evaluated to understand the demographic of people preferring co-living. It was found that in Set-A, 50 out of 74, 98% belonged to the millennial age bracket of 18-35 years of age, of which the majority 67% of the respondents, lie in the range of 22-25 years of age. This is the subset of the age group that most of the co-living operators target, as identified from the interviews of the Company Officials. This age bracket is ideally when students freshly come out of college and start their careers as working professionals. 48% of the respondents from Set-A have annual income of 3-6 lakhs and 31% have an annual income of less than three lakhs. Therefore, the sample population is representative of people with annual income below six lakhs. With the idea to understand the perception of Indians about the co-living industry in India, the survey has a question asking the definition of co-living, by giving four choices as shown in the figure 1 below. In Set-B, 47% chose the Indian definition of co-living, while 38% chose the global definition as stated by Google. This shows high awareness and understanding about co-living among the sample population.

**Fig. 1.** Pie Chart depicting responses for the definition of co-living



b) **Indian co-living Scenario:** This section pertains to respondents of Set-A, who either had lived or would be living in co-living spaces. The idea was to gain an in-depth understanding of factors such as brand recall, awareness of the industry, pros and cons of co-living, consumer satisfaction, and more. People seemed to recall three major co-living brands, OYO Life, NestAway and Zolo Stays. 75% of the respondents recalled OYO Life, a major reason for this being; OYO is already an established name in the Hospitality sector. NestAway garnered 65% popularity among the respondents, which can be attributed to the fact that they were the first in the industry and their use of ATL

marketing campaigns. Zolo Stays has 55% recognition because of its presence in more than 11 major cities in India, while others are yet to reach their potential. Social media and word-of-mouth were found to be the key drivers in spreading awareness about co-living spaces. From the data analysed, 70% of the people chose social media as a medium to know about co-living brands, while 63% attributed the knowledge to word-of-mouth and referrals.

Two major disadvantages of co-living spaces were identified from the survey responses. 67% of people stated the lack of privacy as a major concern while 66% mentioned that they were uncomfortable in handling other people's mess. This becomes even more relevant as post pandemic social distancing has to be followed as well as a hygienic lifestyle will be given top most priority. Other factors that included were: not having full autonomy on decisions (59.5%), potential arguments with co-residents (44.6%), potentially not liking someone in the group (39.2%), and delay in repairs and maintenance (28.4%).

People agreed on the fact that co-living companies made it easier and effortless to stay for short duration work purposes in the city. This was analysed by CES scale (Customer Effort Score), which was defined on 1-5 scale, with 1 being, strongly disagree and 5 being, strongly agree. The result obtained was 3.9, vindicating our theory. In this fast-moving world, people choose convenience over price. This was proved by the responses of people who will be willing to pay a premium for getting all the basic facilities like electricity, laundry, parking spaces, food, Wi-Fi, etc., managed by the co-living operator. The CES value obtained was 3.9, on a 1-5 scale, with 1 being strongly disagree and 5 being strongly agree.

Another important aspect from the business point of view was to understand future customer needs. For this analysis, responses of Set-B were considered and it was found that apart from the basic facilities, people were even willing to add extra facilities at a premium price. 70% of the people opted for gym as an extra facility, followed by 59% people wanting garden and 50% swimming pool. A significant number of people (39%) wanted to improve the existing facility rather than getting a new facility. With the help of CSAT scale, customer satisfaction towards the current living condition compared to what has been advertised was assessed. It was found that only 15.6% was the percentage of satisfied customers, indicating that the operators need to improve their services.

c) **Future Expectation of Customer Post-Pandemic:** Pandemic has changed our lifestyle, which the co-living spaces also has to incorporate for it to flourish. With social distancing in place, it was found that there is an inclination among the people to upgrade from their current room sharing to a private room. From the survey, 57.5% of Set-A are willing to opt for private spaces even at a higher price, so now the operators need to modify their inventory from triple sharing to private rooms and limit the accommodation to a maximum of twin sharing. Moreover, the frequency of housekeeping needs to be reconsidered to maintain hygiene as the survey responses showed that 46.8% people would want to have daily housekeeping in their room.

Furthermore, people will be less comfortable sharing certain amenities provided by the operators, this was made certain from the survey as almost half of the respondents mentioned

that from now on, they would be apprehensive in sharing bedroom facilities like cupboard and study tables. 30% of the people showed concerns on sharing kitchen utensils and appliances. Groceries and household appliances are the other amenities that they were still considerate to share with their co-residents, as this would cut down their cost and not have too much bearing on the hygiene issue.

d) Statistical Analysis: To develop the model for the discriminant analysis responses of Set-A were chosen. This method was chosen, as the dependent variable was categorical data while the independent variable was metric data.

**Fig. 2.** Test of equality of group means

Tests of Equality of Group Means					
	Wilks' Lambda	F	df1	df2	Sig.
Proximity to Work	.430	98.266	1	74	.000
Duration of Stay	.995	.356	1	74	.553
Amenities Provided	.496	75.225	1	74	.000
Brand Name	.999	.074	1	74	.786
Rent	.993	.555	1	74	.459
Recommendation of Friend/Colleague	.521	68.171	1	74	.000

Figure 2 represents the test of equality of group means. This table shows that three independent variables namely, proximity to work, amenities provided and recommendation of a friend/colleague, have a significant value less than 0.05, which implies that the hypotheses Ha1, Ha3 and Ha6 are accepted i.e. they have a significant influence on the dependent variable [34]. Wilks' Lambda checks the contribution of each variable to the model. If its value is nearer to one, it implies that the independent variable is insignificant [35]. For significant values greater than 0.5, Wilks' Lambda should be nearer to one, which is shown in the table and hence the data is coherent.

The pooled within-groups matrices provide bivariate correlations among all the variables is depicted in Figure 3. The independent variables should not be highly correlated which is shown in the figure, as all the values are below 0.5.

**Fig. 3.** Pooled within-group matrix

Pooled Within-Groups Matrices							
		Proximity to Work	Duration of Stay	Amenities Provided	Brand Name	Rent	Recommendation of Friend/Colleague
Correlation	Proximity to Work	1.000	.213	.265	.174	.310	.256
	Duration of Stay	.213	1.000	.341	.310	.394	.270
	Amenities Provided	.265	.341	1.000	-.023	.033	.121
	Brand Name	.174	.310	-.023	1.000	.428	.343
	Rent	.310	.394	.033	.428	1.000	.320
	Recommendation of Friend/Colleague	.256	.270	.121	.343	.320	1.000

Canonical correlation represents the strength of association between the dependent variable and a group of independent variables [36]. Value of 0.854 was achieved proving a high correlation. Eigenvalue of 2.691 was achieved showing higher amount of variance shared among the linear combination of variables [35]. Both the above values were shown in Figure 4.

**Fig. 4.** Summary of canonical discriminant functions

Function	Eigenvalues			Canonical Correlation
	Eigenvalue	% of Variance	Cumulative %	
1	2.691 <sup>a</sup>	100.0	100.0	.854

a. First 1 canonical discriminant functions were used in the analysis.

Wilks' Lambda				
Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
1	.271	92.716	6	.000

The structure matrix shown in Figure 5 represents simple correlation between the independent variable and the function [37] [36]. Three factors namely, proximity, duration and amenities show high correlation with a value of more than 0.5. Brand name shows a moderate correlation of 0.181, while rent and duration show very low correlation.

**Fig. 5.** Structure matrix

Structure Matrix	
	Function 1
Proximity to Work	.700
Amenities Provided	.612
Recommendation of Friend/Colleague	.583
Brand Name	.181
Rent	.053
Duration of Stay	.042

The classification results are depicted in Figure 6. It gives the accuracy of the model, known as hit ratio. It tells how much the discriminant model correctly predicts the values. 88.2% of cross-validated groups were correctly classified [35].

**Fig. 6.** Classification statistics

Classification Results <sup>a,c</sup>					
		Predicted Group Membership		Total	
		Comfortable in Living Post Pandemic	Not Comfortable		
Original	Count	Not Comfortable	34	3	37
		Comfortable	3	36	39
	%	Not Comfortable	91.9	8.1	100.0
		Comfortable	7.7	92.3	100.0
Cross-validated <sup>b</sup>	Count	Not Comfortable	33	4	37
		Comfortable	5	34	39
	%	Not Comfortable	89.2	10.8	100.0
		Comfortable	12.8	87.2	100.0

a. 92.1% of original grouped cases correctly classified.  
 b. Cross validation is done only for those cases in the analysis. In cross validation, each case is classified by the functions derived from all cases other than that case.  
 c. 88.2% of cross-validated grouped cases correctly classified.

## Conclusion & Implications

There is no substitute for a home. Nevertheless, we live in an age where we need to move to new cities for better opportunities and leave behind the comfort of our home. We live in a sharing economy where we want to enjoy life without having to manage the hassle of it. Co-living is a modern form of rental accommodation providing the people with all the facilities they require to enable a comfortable lifestyle. As they are away from home, they want a home-like model and co-living is able to provide the same.

There are a number of co-living operators in India who are constantly trying to improve the facilities provided to the residents. The migrant workforce, which prefers co-living as the option of renting, have income less than six lakhs. This shows that people with higher incomes have still not shown any inclination towards co-living as an ideal option to stay. Moreover, the age group of respondents is in line with the target group identified by the co-living operators. In this age, social media is the key driver to advertise your business and spread awareness about it and co-living brands have justified this fact. Companies need to increase their marketing spend or change their promotional strategy to capture the potential customer base of 50 million.

Post pandemic, the lifestyle and thought process of people will change. They will be more cautious towards their hygiene, preference towards a private room will increase, so companies will have to design and manage their places as such to maximize the residents' comfort accordingly. As long as people get better-managed facilities, they are happy to pay a premium. From the statistical analysis, it can also be concluded that post pandemic the factors that will influence consumers in choosing co-living spaces the most are, proximity to work location, amenities provided by the operator and recommendation from a friend/colleague. These factors will have a high bearing on their decision to go back to co-living or start afresh in co-living. Thus, companies should focus on bringing up the new co-living spaces with respect to these factors in future. Rent will not have a major influence in their decision which is coherent with what the company operators are predicting.

As it is predicted that there will be a shift of consumers to organized-housing in future, there will be a surge in the employability rate of related industries as the demand for people in providing various facilities like, security, housekeeping, meals, and management, to run co-living spaces will increase. Thus, co-living companies will also help in improving the employability rate in the country in the near future. Moreover, tenants might also need medical help, thus co-living companies can keep an in-house doctor and collaborate with a diagnostic center for ease in testing. The question of commute will be a concern as every tenant may have an apprehension towards using public vehicles due to hygiene concerns. The companies can have a collaboration with ride-hailing services that will help their residents to travel to and from their workplaces safely.

The growth of the industry has stagnated during the lockdown as a majority of the company has shown a decline in its occupancy rate. Although the pandemic has delayed the process, it is only probable that the business, in time, will go back to its former state.

## Limitations And Future Prospect

Due to the paucity of time, the interview study contains only a limited number of companies that are widely known in our target group. Also due to the current situation, we were unable to perform face-to-face interviews and went ahead with video conferencing or telephonic interviews. Because of the lockdown and restricted travel around the country, no physical tour of the co-living spaces could be conducted which could have imparted a better understanding of the services and quality of space provided. Though the companies selected for the present research work provides a complete representation of all the models of co-living spaces available, the results would have been more general and applicable pan-India if the study were conducted with all the players.

Additionally, the paper was more concerned with the future of co-living spaces from the customer point of view and what are their expectations from these spaces due to the pandemic, it did not dive deep into the financial aspect from the company side. The business losses that the company bore, due to several reasons ranging from the increase in operational cost to decrease of rental occupancy, was something the research could not cover. The paper confined itself within the theoretical aspect and did not divulge into a more precise statistical prediction, like the amount of time it will take to recover the loss it has incurred so far, the time by which it will reach its former business tally and how fast it will grow once the pandemic resides.

Thus, in the future, the entire gamut of co-living spaces could be considered for the study. The researcher could personally live in various co-living spaces for a few days to get a better grasp of the idea of co-living and what the company is offering to its residents. Future research studies can also incorporate the financial aspects of the company so that it can lead to a holistic understanding of the entire industry. Concepts like total revenue, margins, operational expenses, the recovery time of the industry, and more can create a broader scope of research.

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