

Millennial Needs and Aspirations for Emerging Housing Typologie

Sidharth Jain^{1*}, Avitesh Vaishnavi Nayak²

Abstract

A house is much more than just a space confined by walls. People that occupy it, give meaning to it through the experiences and memories they associate with it. People from different generations, have shared different circumstances and have had different experiences as they were coming of age. This influences their behaviour, their lifestyle and their aspirations/needs towards housing. The targeted user group of this study is the Millennial generation. Growing up in a complex and innovative time of technological change, millennials were the first generation who had access to the whole world through technology. This hyper-connected world with global access has shaped their behaviours and needs; and in turn affects their expectations and aspirations. This research is focused on the identification and analysis of housing needs and aspirations of the millennial generation. The aim of the research is to identify important principles and characteristics which can be incorporated in future housing designs and strategies. This will be accomplished through studying human needs in a living space, analysing existing housing typologies, and through mapping housing preferences of millennials and those of older generations.

Keywords: Millennial, millennial housing, social spaces, housing needs.

INTRODUCTION

Generations are people drifting through time so each generation is comprised of people with distinctive traits and behaviours. William Strauss and Neil Howe, two specialists on generational studies, believe that every generation is affected by its “age location”, meaning that important events that occur throughout the lives of people shape them differently (Strauss & Howe, 1991). The way people make choices has evolved with time. Each generation has adapted to different aspects of life like family, career, and housing differently over time.

The targeted user group of this study is the Millennial generation. Millennials as accepted by many researchers, are the group of individuals born between early 1980s and early 2000s. According to a research by Pew Research Centre, millennials are delaying marriage and having children, and prefer renting to avoid the responsibility of owning a home. Their social determinants influence their location, housing choices, and their meaning of home. Global influence and rapid technological change influence Millennials more than prior generations. (Arnett, 2004) [1]

*Author for Correspondence

Sidharth Jain

E-mail: sidharth.dhruv@gmail.com

¹Student, Department of Architecture, School of Art & Architecture, Sushant University, Gurugram, India

²Assistant Professor, Department of Architecture, School of Art & Architecture, Sushant University, Gurugram, India

Received Date: January 29, 2024

Accepted Date: April 01, 2024

Published Date: April 16, 2024

Citation: Sidharth Jain, Avitesh Vaishnavi Nayak. Millennial Needs and Aspirations for Emerging Housing Typologie International Journal of Housing and Human Settlement Planning. 2024; 10(1): 10–31p.

Growing up in a complex and innovative time of technological change, millennials were the first generation who had access to the whole world through technology. This hyper-connected world with global access has shaped their behaviours and

needs; and in turn affects their expectations and aspirations. This group of millennials is anticipated to make up about 75 percent of the workforce by 2025, and has already overtaken the world's largest living generation, the Baby Boomers (people born between 1946 and 1964). (Kloke, 2014) [15]

This generation has grown up trying to adapt to a time of rapid change and instability. Factors like social media, technology and sharing economy, etc. affect how millennials perceive and define the spaces they want to live in. The environmentally conscious, debt ridden, tech-savvy generation is beginning to redefine what was once considered a stable way of life. This instability helps them adapt to changing times. The notion of home is something that comes to mind when we think of stable. How do we define and perceive a home in this rapidly changing world? How will the idea of 'home' change with the changing norms and lifestyles? Home is much more than a space confined by walls. It acquires its identity through the experiences and memories associated with it. (Timmerman, 2015) [29]

Objectives

- To Study and document, the needs and aspirations of millennials towards housing.
- To identify the housing preferences of the millennial population and those of the previous generations to understand if there is a difference in the same; and identify the factors (social, culture, economic, technology, etc.) that influence millennial expectations for housing.
- To analyse the existing housing typologies to understand if there is a gap in the housing sector in providing an appropriate housing for millennials.
- -To suggest strategies for future housing considerations.

RESEARCH METHODOLOGY

Literature Review

- Study human needs and requirements for well-being in a living space.
- Study documented millennial behaviour in different social contexts.

Preliminary Questionnaires (Online Surveys)

- Map housing preferences of millennials and the previous generations.
- Understand the influence of social, cultural and technological factors on millennial aspirations for housing.

Primary Surveys (Online Surveys)

- Document, the needs and expectations of millennials for housing.

Case Studies

- Study and analyse existing housing typologies.

Data Analysis-Inference Generation

- Analyse and compare the data collected to conclude if there is a gap in the housing sector and draw inferences from the collected data.

Conclusion

- If a gap is identified in the housing sector, propose ways to integrate the needs of millennials in future housing designs.

SCOPE AND LIMITATIONS

- The study is focused on analysing housing preferences of millennial population in Gurgaon. Gurgaon has seen rapid urban growth in the past few years and is emerging as a prosperous city.

It has witnessed emergence of an urbanized lifestyle. It has become a hub for start-ups, and social spaces like cafes, clubs, malls, etc.; everything that millennials crave.

- Data collection is limited to online surveys, secondary case studies and literature review due to the restrictions imposed by the pandemic.

HUMAN NEEDS IN A LIVING SPACE

People in most parts of the world, spend majority of their time indoors. Thus, the architectural features and the design elements of a built space have a direct impact on the behaviour and interaction of the occupants. (Wallace, 1987) [31] A living space should be more than just a physical enclosure; and should take into consideration the physical, psychological and physiological needs of the user. There are a limited number of fundamental human needs and they have remained constant through the course of time, and across different cultures. The only thing that has changed is how these fundamental needs are satisfied. (Jacobsen, n.d.) [11]

Maslow's Hierarchy of Needs

The theory of Maslow's Hierarchy of needs categorizes human needs into five tangible heads- physiological, safety, love, esteem, and self-actualization. (Figure 1) The needs are listed in a way to create a hierarchy- basic needs such as food and water at the lowest level of the pyramid, and more complex needs such as self-fulfilment at the top of the pyramid. When the basic needs are met people can focus on the higher levels according to the hierarchy. (McLeod, 2018) [19]

The hierarchy created by Maslow (1943) can be broken down into two types of needs- deficiency needs and growth needs. The first four levels of needs in Maslow's pyramid, namely- physiological, safety, love and esteem can be grouped into deficiency needs. These needs arise from deprivation, which in turn inspires people to meet these. The longer these needs aren't met, the stronger is the desire to meet them. So, it is preferable to satisfy these needs to avoid any physiological consequences. The highest level of needs in the pyramid which is self-actualization is termed as a growth need. These needs do not arise from deprivation of anything, rather they are a result of the desire to achieve personal growth and to become a better version of oneself. (McLeod, 2018) [19] (Robert J Taormina, 2013) [25]



Figure 1. Source: Maslow's Hierarchy of Needs (McLeod, 2018).

Physiological Needs

Physiological needs are needs which are important for survival and include food, water, shelter, sleep, temperature regulation, etc.

Safety Needs

Safety needs help in maintaining order and to keep control over one's life. They also ensure the physical safety of a person. These needs include physical and financial security, healthcare, safe environment for living, etc. (Hopper, 2020) [10]

Love and Belonging

These needs drive human behaviour and help a person in achieving a sense of belonging. Humans want to be accepted and loved by others and the absence of these needs leads to psychological consequences like anxiety and depression. These needs include family, friendship, intimacy, social and community groups, etc. (Darius Sollohub, R. S., 2010) [7]

Esteem

After the first three levels of the pyramid have been satisfied, the needs for esteem play an important role in shaping a person's behaviour. People want to be appreciated and recognized for their accomplishments and efforts. People feel confident about themselves if they're able to satisfy these esteem needs. However, if people are unable to satisfy their esteem needs, they may experience inferiority and might feel incompetent. These needs include respect, status, self-esteem, recognition, etc. These needs can also be further divided into two types – lower needs and higher needs. Lower needs refer to the need for being respected by others while the higher needs refer to the need for being respected by self. (David Lester, 2010) [8]

Self-Actualization

This is the highest level of the hierarchy and is summed up by Maslow as, "what a man can be, he must be". It is the use of one's talent and abilities to reach the true potential of one self and to do the best of extent what one is capable of doing. These needs include contentment, personal fulfilment, growth, etc. (David Lester, 2010) [8], (Chapman, T. 1999) [4]

It can be concluded that satisfying these needs has a positive impact on the behaviour and development of an individual; and diminishes any psychological or physiological disorders. Understanding these fundamental needs is also very important in case of designing living spaces. If these basic needs are considered during the design process, then the living spaces designed would be more relevant to the aspirations and expectations of the users. (Sayyed Javad Asad Poor Zavei, 2010) [26]

Personal Space - Privacy and Withdrawal

People need personal space for privacy in their everyday lives. This personal space acts as a buffer space which is socio-psychological, invisible yet is physically tangible. This is a space which other people may not enter without our consent; and is used to take refuge from the hyper-connected world outside, to relax or to feel in control.

A major problem people face is the need to regulate and control social contact. We want to have access to certain individuals during some parts of the day but we want to limit the number of people who see us in certain contexts. A living space allows separation from the outside world whereas, divisions or rooms within this living space allow separation for people living together. (Jacobsen, n.d.) [11]

Privacy can be explained as a process of regulating a psychological boundary, in which the feeling of being in contact with others and that of being in seclusion are both present; and are strong/ weak under certain circumstances and contexts. Being in contact with others for too long and being in

seclusion for too long are both unpleasant. Built environment should be responsive to the occupants and should give them control to alternate or switch between these states of being in contact or absence of contact. (Ali Namazian, 2013) [1]

Architectural elements like a door allow regulation of social contact while defining clear boundaries, but in certain circumstances a door may not provide enough flexibility to adapt to changing privacy needs. Instead of having to transition to a different place/ room to achieve privacy, a space should be designed, to allow a user to achieve varying degrees of privacy within the same place/ room. It could include different functions merged into one which help transform the space according to the needs of the user. This concept is adopted in various cultures. For example, Japanese houses have partitions and walls which can be moved/ displaced to make flexible spaces, which can accommodate various social functions like sleeping, socializing, exercising, eating, etc. according to different times. (Ali Namazian, 2013) [1] (Kesan, 2007) [14]

While it is important to have spaces, which give us a control over privacy within the space, it is also important to have physical barriers between spaces. There are certain social situations in which people feel the need to withdraw from social observation or contact. Thus, it is important to consider segregation from the outer environment, as well as segregation between co-inhabitants within the living space. (Chavis, D. W., 1986), [5] (Conley, R., 2015) [6]

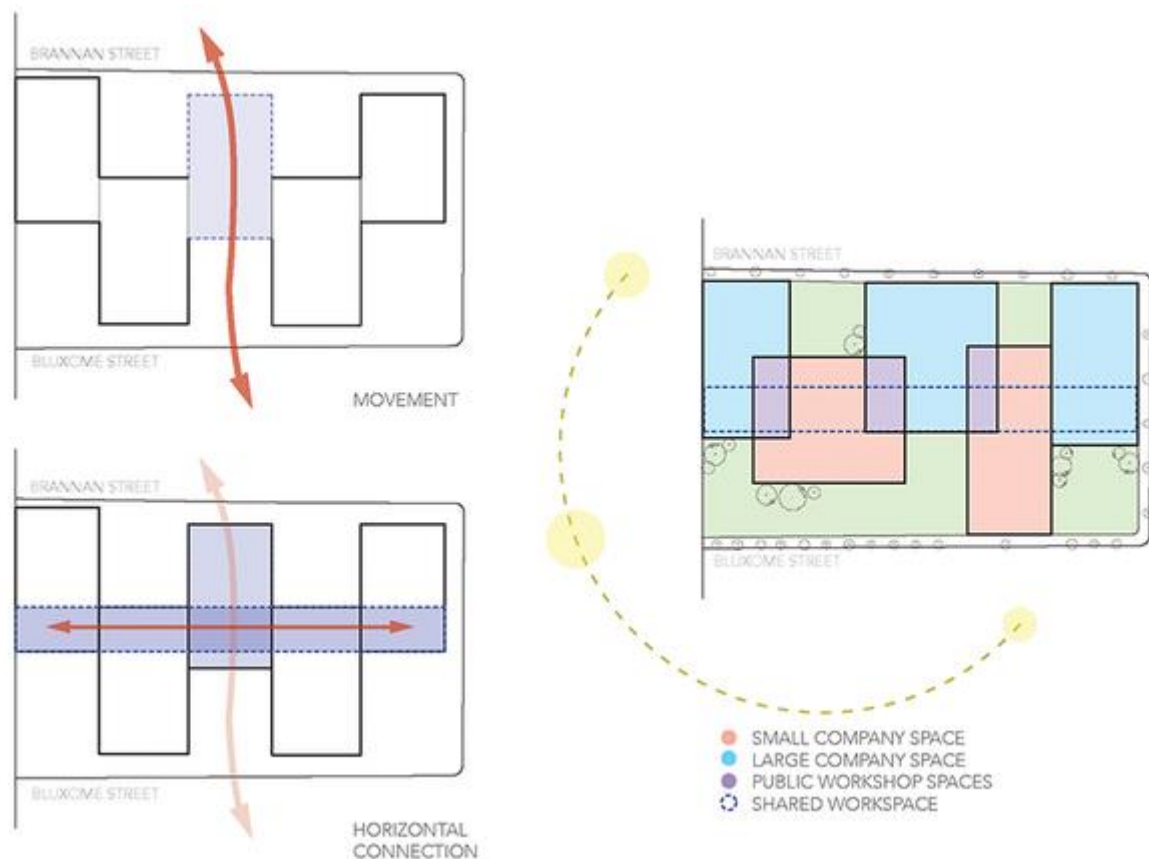


Figure 2. Territoriality + Boundaries – Workplace + Public Realm (Conley, 2015).

Personal Space - Territoriality

Territory is another factor which affects regulation of privacy in a personal space. (Figure 2) People like to demarcate boundaries and establish territories, to claim ownership of a place and to maintain their control over a space. Territories can be divided into primary, secondary and public territories. Primary territories can be spaces clearly demarcated by either the spatial quality or the built

environment. Secondary and public territories are indeterminate and have no clear demarcation. (David Lester, J. H., 2010) [8]

People express themselves through personalisation of space, to form a connection with the space and to claim ownership. At a broader level using elements like a wall or a fence can act like a non-verbal way of establishing ownership. Within a residence however, using material objects that are personal is used to mark territory. Buildings should be designed in such a way that they reduce anonymity and demarcate private and public spaces while giving the control of these boundaries to the users. (Kesan, 2007) [14]

MILLENNIAL BEHAVIOUR

People born between 1982 and 2000 have been widely recognized as the millennial generation. Millennials were brought up in a period of rapid economic and technological advancement, which has created technological and social shifts between older generations and millennials and has given them a distinct cultural identity.

According to a long-term study completed in 2006, millennials have significantly different personality traits than those of people belonging to Gen-x. (Figure 3) On 10 out of 16 factors in a personality test, the millennials showed significant differences in personality as compared to their predecessor generation, Generation X. (Borges, 2006) [3]

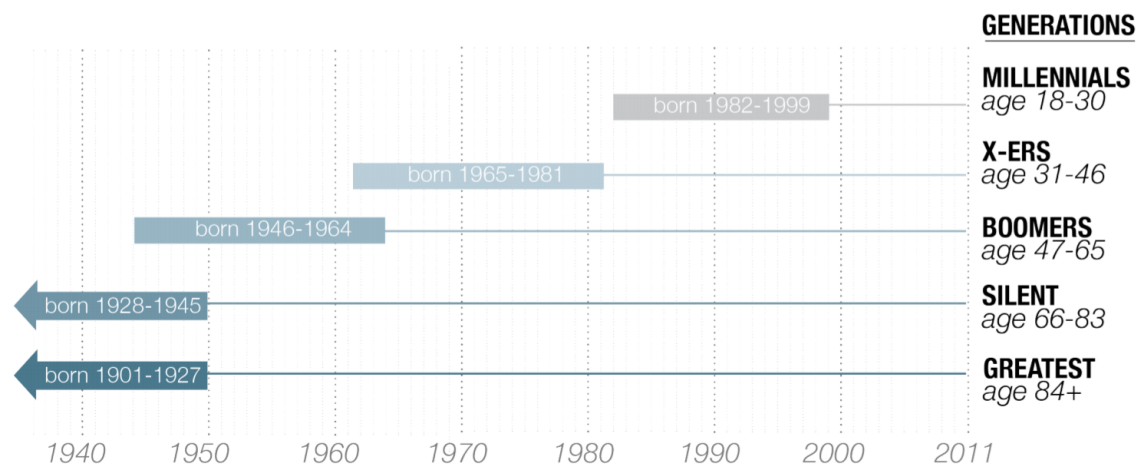


Figure 3. Generations by Birth Year (Keeter, 2010).

Influence of Technology

This generation of millennials has grown up with an unrestricted access to internet and technology. It affects different aspects of their life from education, transportation to healthcare and communication. Millennials are known as multitaskers and can send, receive and process information on multiple devices at once. They extensively use social platforms and the rise of social networking sites has created an even more connected generation. They have created a parallel connectivity through social networking, which utilizes text, image and video for interaction and communication. (Lindsey A. Gibson, 2014) [16]

The country and culture they belong to creates certain differences, but rapid change, social media, and globalization have made the millennials more comparable and interconnected than people from earlier generations.

Need for Flexibility and Convenience

To take advantage of better options and choices, millennials tend to keep their commitments flexible for longer periods and expect maximum flexibility from others. For example, they often delay

important decisions such as selecting a college or accepting a job offer to the very last moment to avoid missing on better options. Even in terms of education or learning something new, millennials often opt for online courses which can be attended at a time and location convenient to them. (Darius Sollohub, n.d.) [7] (Lindsey A. Gibson, 2014) [16]

Access to the internet has allowed them to obtain any service according to their needs, at their chosen location, transcending the barriers of distance and geography. They can order food, products and services, and get them delivered to their doorstep without having to go through the inconvenience of going out and searching for an ideal restaurant or product. (Sweeney, 2006) [27]

Sense of Community

A community can influence the psychological connections between people within it. The phrase ‘sense of community’ is used to describe the relationship between an environment or a place and its users or residents. Millennials aspire for a sense of belonging within their community and their surroundings. To feel like a part of the community, they want to identify with their surroundings and form personal connections which helps them achieve emotional safety and encourages personal relationships. This connection with the environment is established when people living within the community believe that they feel safe and comfortable in their environment. (Timmerman, 2015) [29]

There are two interpretations of the word “community”. One is the “geographic concept” of community like a village, town or a city. The second is the “character of human relationships” which is independent of the location. (Borges, N. J. , 2006) [3] (Maslow, 1943) [18]

Elements like emotional safety, personal investment, sense of belonging, boundaries, etc. affect an individual’s connection to the community. Boundaries help in demarcating and protecting personal space, while providing emotional safety to an individual, to express his needs and feelings and to form relationships within the community. Sense of belonging includes the expectation and belief of an individual that he is accepted by other members within the community and has a secure place in the community. An individual is more emotionally connected to a community if he is a member of the community due to personal investments, which also makes his place in the community more meaningful. (Chavis, 1986) [5] (McLeod, 2018) [19]

Housing Preferences

To identify housing preferences of millennials and of older generations, an online survey was conducted for a period of one week. This survey was done to understand if millennials have different housing preferences than other generations. After a week, a total of 29 responses was collected out of which 48% of the respondents were in the age group 18-25 years, 24% of the respondents were in the age group 26 to 34 years, and 28% were in the age group over 34 years.

CURRENT ACCOMMODATION

In the 18 to 25 years age group, 50% of the respondents live in hostels, 14% live in paying guest accommodation, 22% live in a society and 14% live in independent housing.

In the 26 to 34 years age group, 43% of the respondents live in paying guest accommodation, 43% live in independent housing and 14% live in a society.

In the over 34 years age group, 62% respondents live in a society and the remaining 38% live in independent housing.

PARAMETERS TO CONSIDER WHILE BUYING/RENTING

When asked about the most important parameter for them while choosing a place to buy or rent, in the 18 to 25 years age group a majority of the people (50%) chose “affordable accommodation”, 36%

of the respondents chose “outdoor living space”, and 14% chose “smaller house requiring less maintenance” as the most important factor.

In the 26 to 34 years age group, 57% of the respondents chose “adaptable spaces”, and the remaining 43% of the respondents chose “outdoor living space” as the most important parameter to consider while choosing a place to buy or rent. (Ali Namazian, A. M., 2013) [1]

In the over 34 years age group, 50% of the respondents chose “outdoor living space”, 25% of the respondents chose “energy efficiency”, and the remaining 25% of the respondents chose “Bigger house to accommodate a family” as the most important parameter to consider while choosing a place to buy or rent.

PROXIMITY OF RESIDENCE TO FACILITIES/FUNCTIONS

In the 18 to 25 years age group, respondents prefer proximity to school/college and public transport.

In the 26 to 34 years age group, respondents prefer proximity to workplace, public transport and hospitals.

In the over 34 years age group, respondents prefer proximity to workplace and school.

SECONDARY CASE STUDIES- MILLENNIAL HOUSING

In accordance with the culture, climate and demographics of a particular place a house can be diversified into various categories like apartments, housing complexes, villas bungalows, co-living spaces, etc. Traditional shelters which can be found in rural parts of the country include huts which are made from locally available materials, and have evolved over time to include modern features and functions. Apartments and flats are self-owned or rented housing units in multi-storey buildings and are highly preferred these days. (Maslow, 1943) [18] (McLeod, 2018) [19]

Housing societies or condominiums are another type of accommodation which are differentiated by ownership. The units in a housing society are owned individually but they include common functions and areas within the complex like swimming pool, gym, sports facilities, outdoor areas, etc. which are co-owned equally by all the owners. Independent housing accommodation like bungalows and villas are large houses, mostly family owned, and include modern facilities like swimming pools, elevators, landscaped green areas, etc. (Mehta, 2019) [20] (Neil Howe, 1992) [22]

Co-living or shared-rental spaces like paying guest and dharamshalas have existed in India in different forms since a long time. These co-living spaces have become more popular these days, as young renters move to cities for employment and need affordable and convenient housing accommodation.

A survey was conducted by JLL research across seven major cities in India including Delhi NCR, Kolkata, Mumbai, Chennai, Hyderabad, Bengaluru, and Pune. The target group for the study was millennials and the aim of the study was to assess the behavioural patterns in millennials for owning or renting a place. The key objectives for the research were-

- What do millennials prefer: private accommodation or shared accommodation?
- What force them to shift from unorganized shared spaces to co-living spaces?
- How much are they willing to pay for organized co-living spaces?

Urban population in India has increased from 28% in 2001 to 31% in 2011 which has led to an increase in the level of urbanisation. This (figure 4) will further increase to 40% by 2030. Sprawl induced by poverty and demographic expansion have led to migration to urban areas. According to

the survey by JLL, around 4.7 million migrant millennials across India's major cities were employed in the service sector, which is expected to increase to 7 million by 2023. (Vimal Nadar, 2019) [30] (Quenqua, 2015) [24]

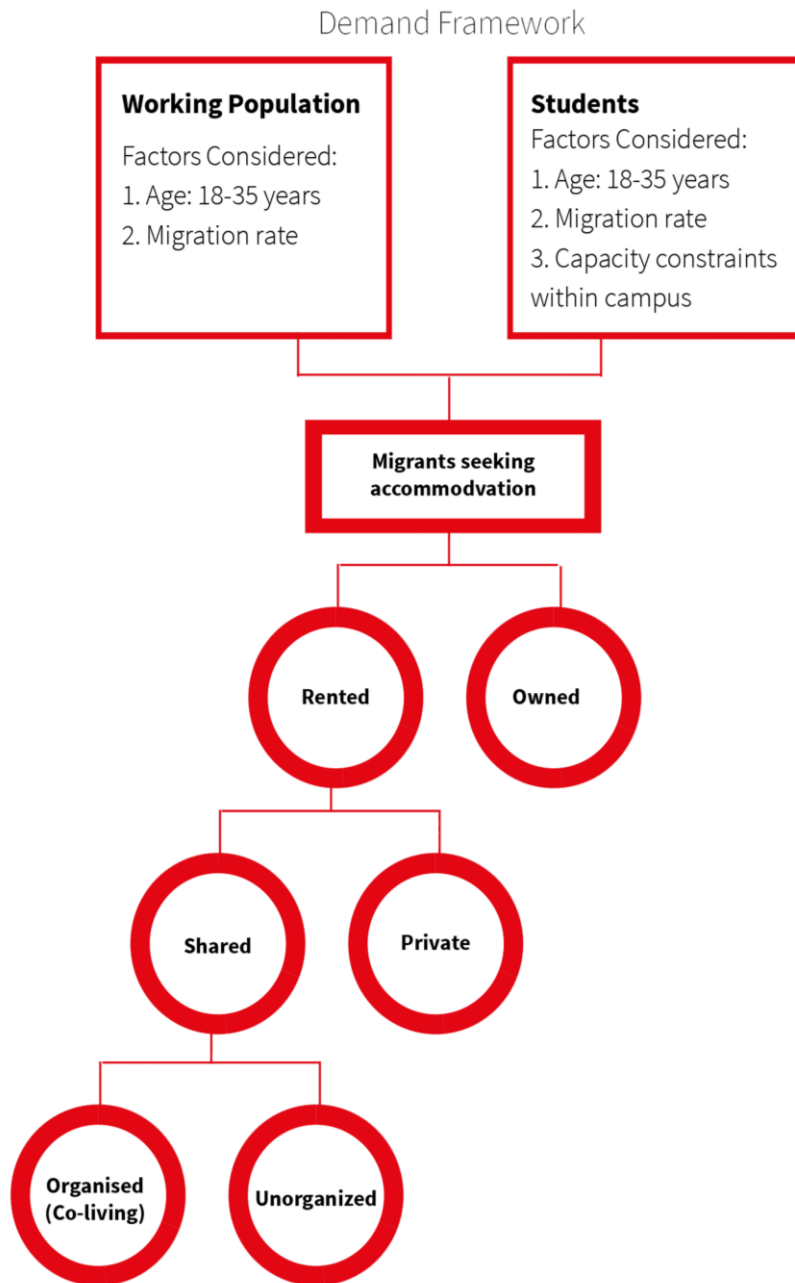


Figure 4. Demand Framework (Vimal Nadar, 2019).

According to the results of the survey-

- Migrant millennial population prefers to rent instead of buying. Factors like unpredictability of extent of stay and affordability make millennials pick renting rather than purchasing. Due to delayed marriage and high cost of housing in most metropolitan cities, millennials are less inclined towards buying and prefer to spend money on travel and experiences. (Figure 5)
- While choosing a place to live in, millennials seek close proximity to their work place, security and convenience and prefer these factors over ownership. Unlike their predecessor's millennials don't want to compromise by moving to peripheral areas of a city just to fulfil their dreams.

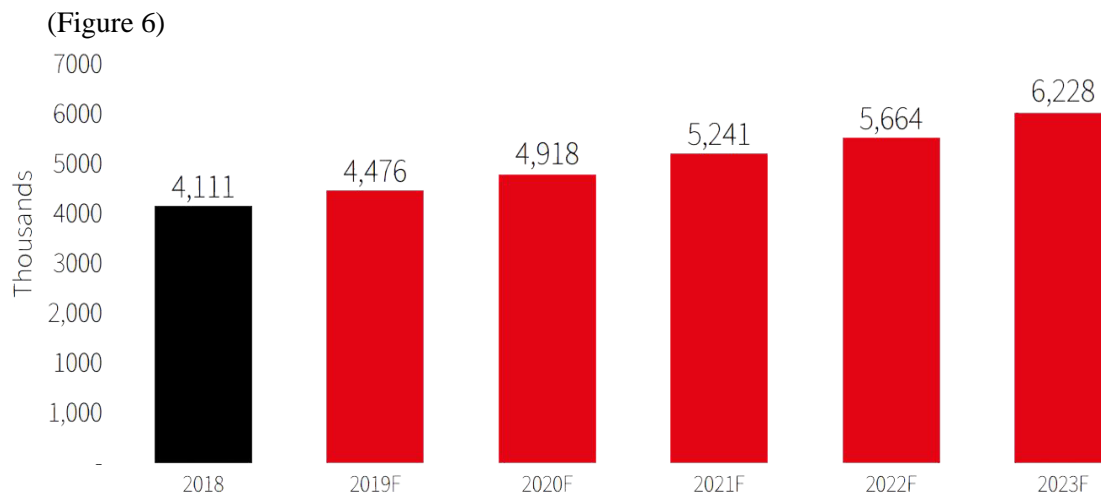


Figure 5. Preference for rented accommodation (Vimal Nadar, 2019).

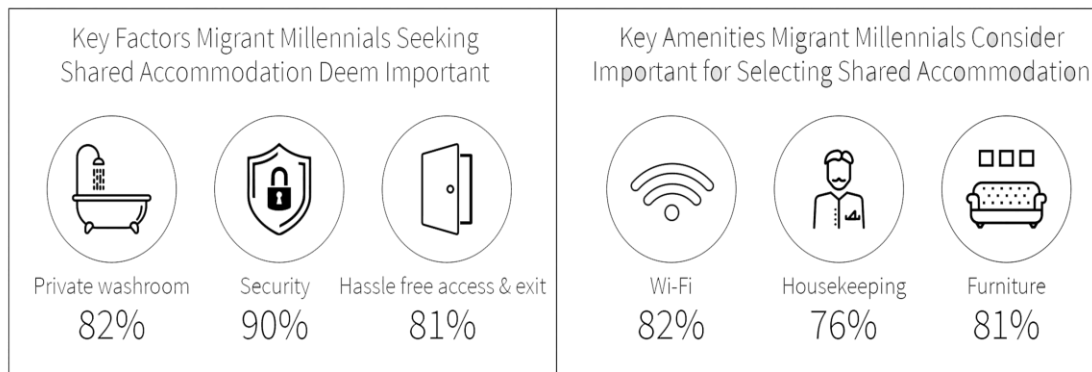


Figure 6. How migrant millennials want to live.

Example 1- The Collective, Old Oak

Location- London, England, UK

Architect- PLP Architecture

Area- 16000 sq.m.

Young people are faced with housing which is either unreasonably expensive or terribly inadequate, which forces them out of urban centres, making them feel isolated. To address this problem PLP architects worked in collaboration with the start-up Collective to develop an affordable way of living based on shared living, communality and high-density. (Figure 7) Collective Old Oak is the largest co-living building in the world.

The concept for the building is to overlap residential and commercial spaces within a single hybrid typology where a condensed arrangement of private residential units is supplemented by collaborative spaces. This arrangement of residential, commercial and collaborative spaces includes living, socializing, working, entertaining and exchanging; which acts as a vertical neighbourhood (Figure 8).

The target population for the Old Oak is young professionals aged between 21 and 35 years. Each floor has themed communal spaces and a large kitchen which is shared by around 30 to 70 residents (Figure 9).

Most residential spaces comprise of “two dios” –two bedrooms sharing a small kitchenette, and some private suites. (Figure 10-11)



Figure 7. Exterior view of Collective Old Oak, London.



Figure 8. Interior view of Collective Old Oak, London



Figure 9. Living space of Collective Old Oak, London

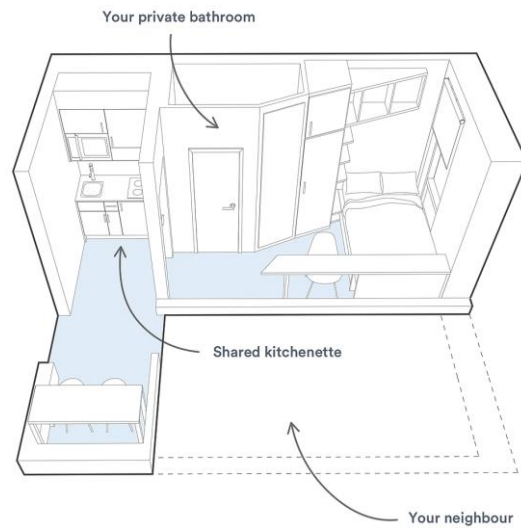


Figure 10 Layout of Collective Old Oak, London

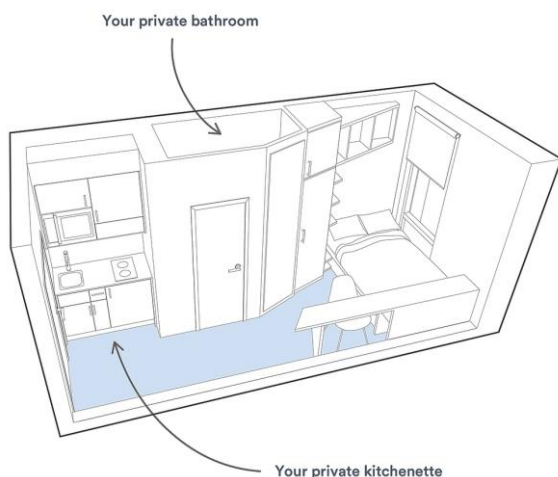


Figure 11. Layout of Collective Old Oak, London



Figure 12. Kitchen Layout of Collective Old Oak, London

A variety of amenity spaces designed to appeal millennials, are located in the central hub. These spaces provide opportunities to residents for interaction and collaboration. (Figure 12-13) The

amenity spaces include a spa, library, games room, secret garden and disco laundrette, and most of these spaces are directly connected to the adjacent communal kitchens.

Example 2- WeLive

Location-110 Wall Street, New York, U.S.

Architect- The We Company

The WeLive project is an amalgamation of hotels and student housing. (Figure 14-16) A part of the building was previously occupied by WeWork, to offer rented desk spaces with shared spaces and amenities for workers at a relatively low cost.



Figure 13. Common space of Collective Old Oak, London.



Figure 14. Gathering space of Collective Old Oak, London.



Figure 15. Living area of Collective Old Oak, London.

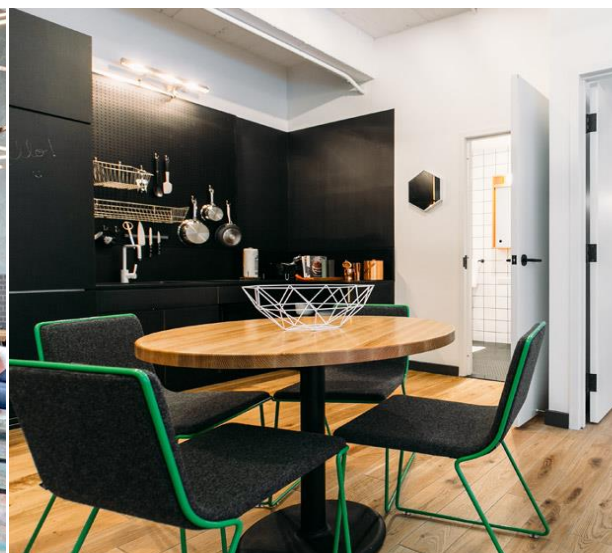


Figure 16. WeLive project, New York.



Figure 17. Bedroom of WeLive project, New York. **Figure 18.** Toilet and Bedroom of We Live project, New York.

The same principles of shared space have been applied to help reduce costs for the users and to convert floors to design 200 fully-furnished residential units. (Figure 17) This is a community-driven concept which is aimed at young renters who seek a sociable lifestyle.

Amenities like lounges, kitchens and bathrooms (Figure 18) are shared within the units, whereas larger communal areas are meant to be used by residents throughout the building.

Depending on how much a user wants to pay he can choose from studio, (Figure 19-20) one-bedroom, two-bedroom, three-bedroom, and four-bedroom units. A resident can share a unit with others or have his own unit.



Figure 19. Kitchen of WeLive project, New York.



Figure 20. Bedroom of WeLive project, New York.



Figure 21. Dining area of WeLive project, New York



Figure 22. Common area of WeLive project, New York

The company hosts communal events and functions within the shared building spaces for the residents. (Figure 21-22) These include karaoke, cooking classes, meals, game nights, and fitness classes.

Example 3- OYO Life AECS Layout

Location- Kundalahalli, Bangalore, India

Architect- OYOxDesign

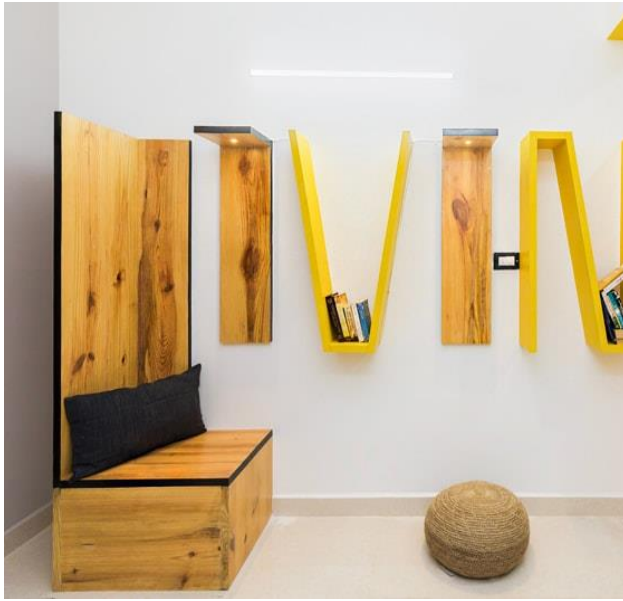


Figure 23. Sitting space in OYO Life AECS, Bangalore



Figure 24. Sports zone of OYO Life AECS, Bangalore



Figure 25. Study space in OYO Life AECS, Bangalore

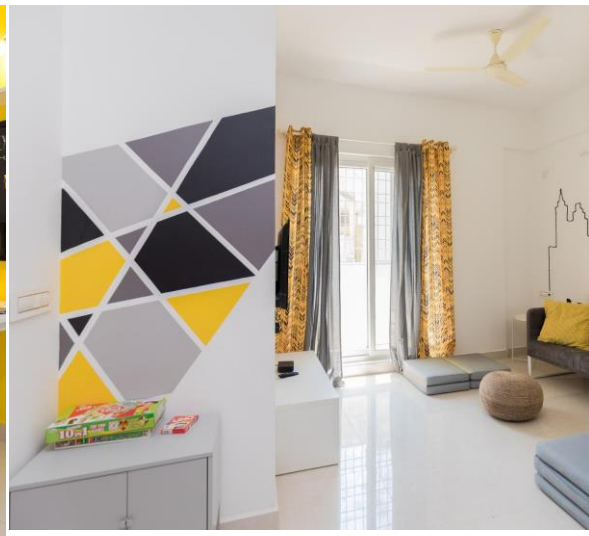


Figure 26. Living space in OYO Life AECS, Bangalore

The property has 36 rooms which provide quality living spaces for young professionals. (Figure 23-25) The passages and corridors were designed in a way to promote interaction and connect between the neighbours. However, workstations and reading corners have also been provided as quiet intimate spaces for individuals.

To match the personality of the young target population, (Figure 26) vibrant colours have been used on walls as well as for furniture in living areas as well as in shared spaces.



Figure 27. Terrace space in OYO Life AECS, Bangalore.

Keeping in mind the pleasant weather in Bangalore, (Figure 27) and to add character to the terrace, a shack was created with a vibrant umbrella roofing for the residents to hang out and interact after a long day at work.

PRIMARY CASE STUDIES- MILLENNIAL CURRENT HOUSING TYPOLOGIES

Housing Typologies in Indian Context

A telephonic survey was carried out to understand the current vs desired amenities in different housing typologies. The participants surveyed were millennials, who are currently pursuing a college degree. The three different typologies considered based on the target group were – Hostel, Paying guest accommodation, and independent housing. Out of the 8 surveyed participants 4 lived in hostels, 2 lived in paying guest accommodations while the remaining 2 lived in independent housing.

HOSTEL

- 1. Location with reference to public transport** – Out of the surveyed participants, 50% of the participants did not have access to public transport (no public transport facilities within 2km) which made it harder for them to travel around, and agreed that they desired close proximity to public transport as it is economical and convenient as compared to using private vehicles or cab rides. The remaining users who had access to public transport said that they used it almost regularly and that it really helped them move around the city.
- 2. Space and occupancy per room** – All the surveyed participants had a 2-3 user occupancy per room within their hostels; with separate cupboards, study tables and single beds for each individual. All the participants were satisfied with the space available in the room for each individual.
- 3. Washroom and bathing facilities** – 75% of the participants felt that there weren't adequate restrooms and bath areas for all habitants. There were a limited number of restrooms which were common for all habitants on a floor which often created a problem, and was inconvenient and unhygienic. All participants desired a separate restroom and bath for each room. (Jacobsen) [11]
- 4. Provision of food** – All participants felt that the food provided in the hostel wasn't bad but it was

of a subpar or average quality, which was a stark contrast to what they're used to eating at home. All the participants had a hard time adjusting to the hostel food. 75% of the participants were not allowed to order food on the premises and felt that they should be allowed to have outside food considering many of them can't adjust to the meals provided in the hostel.

5. **Sanitation in hostel and rooms** – While all participants agreed that their hostel premises were regularly cleaned; only one of the participants had the facility of housekeeping in his hostel for getting his room cleaned. The rest of the participants had to clean their rooms themselves and felt that it would be more convenient if there was housekeeping for the same offered in the hostel. (Jones, 1995)[12] (Keeter, 2010) [13]
6. **In-house laundry service** – Currently, none of the participants had any in-house laundry service within their hostels and had to wash their clothes themselves. As the charges of online laundry service providers were very expensive, they rarely used these. All the participants felt that it was necessary to have an in-house laundry service within the hostel.
7. **Security** – All participants expressed that they had adequate security measures (at least 1 security guard at the entrance of each block/building) in their respective hostels to prevent any outsider or unknown person from entering the premises without permission.
8. **Common social areas** - All participants expressed that their hostels had a lack of common social areas that could be used for gathering and interacting. The corridors and the mess areas were the only spaces that were used for interacting. All the participants desire to have more common areas which could be used by students to interact and connect.
9. **Privacy** – All participants felt that there was a lack of privacy in hostels as each room is shared by 2-3 individuals and is devoid of any physical barriers or partitions.

PAYING GUEST ACCOMMODATION

1. **Location with reference to public transport** – None of the surveyed participants had access to public transport near their accommodation (no public transport facilities within 2km) and travelled using private vehicles. They were satisfied by their means of transport, but felt that close proximity to public transport was necessary.
2. **Space and occupancy per room** – All the participants were living on a double sharing basis and were satisfied with the space available for each individual. There were cupboards, storage and individual beds for each individual.
3. **Sanitation** - All the participants had to clean their accommodation themselves and found it to be inconvenient and cumbersome.
4. **Laundry** – None of the participants had a provision for laundry within their accommodation and had to wash their clothes themselves. All the participants desired a laundry service which was affordable and preferably within the neighbourhood.
5. **Security** – Security was an issue that all the participants had to deal with themselves. They had to be cautious while securing their belongings and locking all doors whenever they had to leave the accommodation.

INDEPENDENT HOUSING

1. **Location with reference to public transport** – One of the participants had access to public transport near his residence and used it to commute to college daily. The other participant did not have public transport in close proximity of his residence and had to commute to college through cab or by car. Both participants felt that close proximity to public transport was needed and was necessary to commute daily.
2. **Space and occupancy per room** – Both the participants had two cupboards and a study table within their bedroom and were satisfied with the current space and occupancy in their living environment.
3. **Provision of food** – All the participants were dependent on their families or cooks for their meals

and found it to be convenient as they did not have to worry about cooking themselves.

4. **Laundry** – All the participants were dependent on their families or house-helpers for managing their laundry and felt it was convenient as they did not have to do it themselves.
5. **Privacy** – All the participants felt that within their housing environment they had the choice to withdraw to their personal space as well as to be in contact with others in more social areas within the residence. This gave them the flexibility to be alone or interact with others as and when they required. (Gibson)
6. **Multifunctional spaces** - All the participants felt that they needed a designated space within their living environment in which they could perform different tasks such as reading, working, studying, or playing music. They want a space which could adapt to their changing needs and could be used for different functions in the future. (Hopper, 2020) [10]

Example 1: Paying Guest Accommodation- House in Sector 55, Gurgaon

The accommodation is located in Sector 55 in Gurgaon. (Figure 28) It has a close proximity to a local market and the sector 54 chowk metro station. It also has a close proximity to the Unicosmos school and the Sushant University.



Figure 28. Exterior of PG Accommodation, Gurugram.



Figure 29. Bedroom of PG Accommodation, Gurugram.

Rooms in (Figure 29) the accommodation are available on a double sharing basis with an attached bathroom and a balcony. Each room has two single beds, two cupboards for storage and two study tables. The accommodation also has air conditioning and power backup.(Figure 30-31)

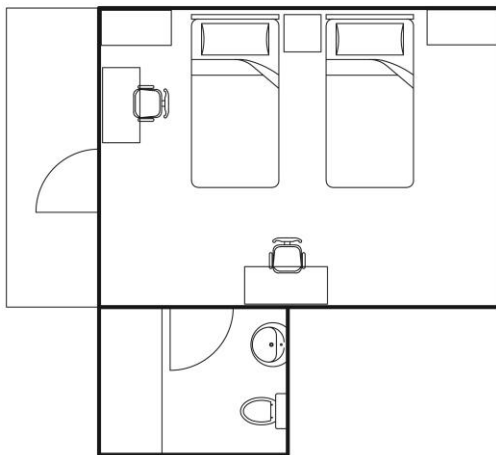


Figure 30. Plan of a room with attached bathroom and balcony



Figure 31. Toilet

Example 2: Hostel Accommodation, Sushant University, Sector 55, Gurgaon

The hostel (Figure 32) is located within the campus of Sushant University in Sector 55, Gurgaon. It has a close proximity to a local market and the sector 54 chowk metro station.

Rooms in the hostel are available on a triple-sharing basis for boys and girls separately. Each hostel block has six floors with lifts. The hostel provides amenities like 24-hour power backup, safe drinking water, 24-hour security, hygienic food, and sports and fitness facilities.



Figure 32. Hostel Sushant University, Gurugram.



Figure 33. Hostel room of Sushant University, Gurugram.

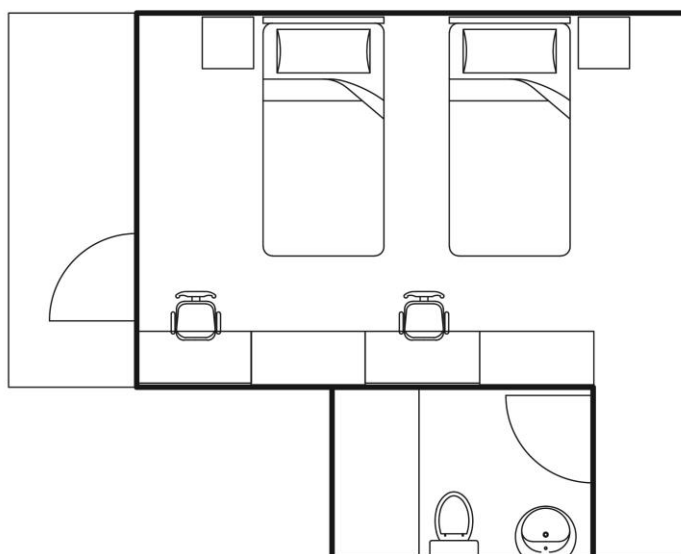


Figure 34. Plan of a Room with attached bathroom and balcony

Rooms in (Figure 33-34) the hostel are available on a double and triple sharing basis with an attached bathroom and a balcony. Each room has two/three single beds, two cupboards for storage and two study tables.

Example 3: Independent Housing- Ansal Jade Villa, Sector 2, Gurgaon

Jade Villa is located in a locality of Old Gurgaon in Sector 2. (Figure 35-38) It is located in close proximity to the Sector 23 Huda Market. The accommodation however, lacks proper connectivity to public transport.

The bedrooms in the accommodation have adequate space and storage for two people, including two cupboards and a double bed.

The accommodation also has a small outdoor green space next to the porch.



Figure 35. Exterior view of Jade Villa, Gurugram. **Figure 36.** Lawn of Jade Villa.



Figure 37. Bedroom of Jade Villa, Gurugram



Figure 38. Kitchen of Jade Villa, Gurugram

CONCLUSION

A bigger house has always been regarded as better and is considered a status symbol. Millennials however are showing a strong inclination towards more humble, unpretentious accommodation. Smaller accommodations help them save on energy and rent costs. However, they want ergonomic, well thought out spaces which include adaptable multi-purpose spaces within these smaller accommodations. While looking for an accommodation, millennials don't look just for a home, rather they want a walkable neighbourhood which has a close proximity to their workplace and is well connected to public transport.

Through an analysis of the secondary case studies, both international as well as in the Indian context, certain principles and characteristics can be identified. Even though the international case studies selected for the research are located in different contexts, they have some similarities. Both the international case studies have been designed as co-living rental spaces. They have been designed to overlap condensed private living spaces with collaborative shared spaces. These collaborative spaces include co working spaces, recreational spaces, dining spaces, etc. which supplement millennial lifestyle and can be used for socializing, working, entertaining, etc. In these international projects, the spaces are designed to accommodate these collaborative public spaces within the living environment.

On the other hand, co-living rental spaces in the Indian context lack these shared spaces, making the residents dependent on public spaces around the accommodation for collaborating or socializing. The emerging co-living rental models in India are based on the use of existing housing typologies rather than introducing or designing new typologies which include collaborative spaces within the living environment.

The primary case studies highlighted issues that millennials face in different housing typologies within the Indian context. Currently hostels and paying guest accommodations have substandard quality of amenities like laundry and bathing facilities. These accommodations also lack common social areas for socializing or interacting. A common necessity across different housing typologies is close proximity to public transport. Most millennials according to the survey, prefer to travel by public transport even if they own private vehicles.

It can be concluded from the research that there is a need for designing spaces which integrate collaborative shared spaces within the private living environment to provide a holistic living experience which resonates with the lifestyle and needs of the millennial generation. Millennials want compact and affordable homes that include multi-purpose spaces, which could adapt to their changing needs and requirements over time; located in a walkable neighbourhood with close proximity to their workplace and to public transport.

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