

Sleeping Pods for Travelers in Indian Cities: A Comprehensive Architectural Research Study

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Abstract - This study is being conducted to analyse the need for pod hotels over public in Indian cities, specifically in airports and railway stations, in order to lessen the demand for shelter for travellers by providing sleeping pods, also known as capsule rooms. These are special buildings that are utilised in various locations to allow people to nap.

A pod hotel is a hotel with multiple little bed-sized rooms known as capsules. Capsule hotels offer inexpensive, basic overnight accommodations for customers who do not need or cannot afford the larger, more expensive rooms offered by more traditional hotels. These are little rest stops for individuals on the move, particularly backpackers and travellers. These hotels offer inexpensive lodging for travellers who only have a few hours until their next flight or train.

Key Words: Capsule room, Sleeping pod, Backpackers and stay.

1. INTRODUCTION

A pod hotel, also known as a capsule hotel, is a style of lodging that originated in Japan and consists of numerous tiny rooms, or capsules, that are about the size of a bed. For travellers who don't need or can't afford the larger, more expensive rooms offered by more traditional hotels, capsule hotels offer affordable, basic overnight accommodations. To lessen the need for shelter by providing places for travellers to rest and sleep. For those who are constantly moving, especially backpackers and travellers, they are tiny resting places. These motels offer travellers who only have a short window of time before their next flight or train cheap, basic overnight lodging.

2. History

2.1 History of sleeping pod hotel

In the Japanese city of Osaka, which is part of the Kansai area, the first capsule hotel debuted in 1979. And renowned Japanese architect Kisho Kurokawa was responsible for its design. The word "capsule," which refers to technical innovation as well as compact and futuristic design, initially entered the Japanese language in the 1960s. In Japan's commercial hubs, a growing issue led to the creation of pod hotels. Salarymen white-collar employees needed a place to kill time and buy a fresh shirt before starting the cycle all over again each day. They spent their days working in the office and their nights drinking. They could instead slide their worn-out

bodies into a personal pod, complete with TV and alarm clock, within minutes of calling it a night for the same price as a drawn-out train excursion to their houses in the suburbs. Though not particularly attractive, it was effective. From there, it spread to further Japanese cities. Since that time, the idea has also gained ground in a number of other nations, including Belgium, China, Hong Kong, Iceland, India, Indonesia, Poland, and Canada. These lengthy capsules, which resemble large cubes, are around six to seven feet long and possibly three feet tall. Without all of the extraneous frills that take up room and potentially waste your time, the goal is to provide people with just enough space to feel comfortable and get a good night's rest.

2.2 Need for sleeping pod hotel

A suitable location for rest. If you need to use a laptop or tablet, they may be able to fit it in with you, but other than that, not much will keep you comfy as you sleep. A secure location for bags that can be stored in lockers. Each participant has a locker of their own for their belongings, ensuring the privacy and security of everything. The main goal is to save money, and by staying in shared accommodations, single travellers can avoid paying for services and extra space that they might not use. These distinctive lodging establishments can make your travels more exciting, memorable, and far less expensive. If can a separate section for male and female guests, or even separate floors and elevators. A proper place with clean toilet and sanitation facilities.

3. Advantages

3.1 Amenities

Pod hotels and capsule hotels both share a similar concept. They are made to take up less room and hold more people. Pod hotels are also intended to provide accessible lodging options for travelers in the middle of bustling cities, where they might not otherwise be able to do so. Pod hotels provide a wide range of alternative lodging choices. Though most of these hotels only provide miniature hotel rooms, some of these hotels offer capsules that are close to the original design of capsule hotels. These rooms often have a full or twin bed, a television, and a safe for your belongings. The smallest rooms share toilets with two or more other rooms. On the other side, larger rooms may come with more facilities including a lounge space and full wardrobe, as well as private bathrooms. Additionally, some of these hotels provide shared rooms,

where two visitors who may not be acquainted stay together. In terms of form and breadth, some of these are bunk-bed-style rooms while others are more akin to dorm rooms or youth hostels.

- Similar to a hostel, many amenities—including restrooms, showers, wireless internet, and dining areas—are shared by everyone. A capsule hotel may offer a shared bathroom and sauna in select locations. Additionally, some hotels offer dining establishments, snack bars or bars (or at least vending machines), and swimming pools. Additionally, they might have bars, lounges, game rooms, vending machines, laundry facilities, internet kiosks, and manga libraries inside the buildings. There might be a lounge with upholstered chairs for lounging with books and newspapers nearby.
- The room is a chamber about the size of a single bed, with enough height for a hotel visitor to crawl in and sit up on the bed.
- Amenities often include a small television, air conditioning, and a desk., an electronic console, and power sockets.
- The capsules, which resemble bunk beds, are stacked side by side and two units high, with steps or ladders leading to the upper-level chambers.
- For seclusion, the open end of the capsule can be covered with a solid door or a curtain, but it can only be locked from the inside.
- There are a lot of shared amenities, such as restrooms, showers, wireless internet, and dining areas. These are the standard features, and luxury is added.

3.2 Can these hotels be ideal

A capsule hotel may be the perfect choice for you if you are constantly on the move when travelling, whether it be for business meetings, sightseeing, or taking in the local culture.

The high-quality capsule hotels come with free (included) wifi connection and a mini television in each unit. To make the capsule more private, shades and/or the doors can be shut. Additionally, each capsule has its own air conditioning controls, allowing you to customise your level of comfort in your modest yet functional space.

3.3 Advantages over other stays

- **Additional Cost Savings:** Savings are unquestionably ensured with rates that are frequently half those of traditional motels.
- **Convenient Location:** The majority of capsule hotels are conveniently located near railway stations and airports, making it easy for travellers to get around. You'll save time

and money by not having to rely on buses, taxis, or even long hikes.

- **24-Hour Check-in:** If you arrive during the workday, they also provide a 24-hour front desk service to help you. You won't have to worry about missing check-in at all if you're saving money by travelling with airlines that have unusual hours.
- **Clean and sterile beds and bathrooms:** Since visitors must check out each day, each capsule hotel pod is cleaned and sterilised every day. A few of the complimentary items you can take from the hotel include individually packaged soap and towel sets, as well as the frequently cleaned shared shower rooms.
- **Creates a Quiet Environment:** All rooms, with the exception of the lounge area, have a "keep-quiet" policy. Most hotels don't even have changing rooms, but capsule hotels do. Consequently, it is possible to get a restful sleep. Additionally, there is no possibility of loud noises coming from the exterior or your neighbor's neighbour next door. Consequently, one can take pleasure in a quiet setting when visiting.
- **Extremely Comfortable:**

The beds in pod hotels are surprisingly comfy, and you have access to all the amenities, including charging your equipment within the room and watching your favourite TV shows while sipping complementary beverages. Additionally, you can adjust the light and temperature in your pods as well as shut the doors to your capsules for more privacy.

4. Types of Sleeping Pods

Despite the fact that sleeping pods and cabins are still relatively new, a number of well-known companies are already providing their services across various places. Some are only accessible in certain areas and nations, while others are accessible everywhere. These are the principal brands. Here are some of the most well-known sleeping pod companies: GoSleep Pods, Yotelair, Napcabs, Zzzleepandgo, Sleep 'n Fly, SleepBox, IZZZLEEP, SAMS - Snooze at my Space, etc

• GoSleep:

A unique line of reclining seats with covers that provide seclusion in a crowded airport. These pods provide a reading light, power outlets, a luggage storage, and internet connection. The seat may recline all the way flat like a bed.

• YotelAir:

A capsule hotel featuring single- or double-sized beds, work areas, and even private bathrooms. The private

accommodations offer a flat-screen TV and complimentary WiFi. Standard and deluxe cabins are available; the latter are larger and have an adjustable smart bed.

• Napcab:

The cabins contain a bed and a desk and are soundproof. Additionally, the cabins have internet access, power plugs, anti-jet lag lighting, and multi-media touch screens with flight information.

• SnoozeCube:

These New Zealand-designed and -built cubes may accommodate one or two people.

These sleeping cubes are equipped with a bed, a TV, and internet.

• SleepBox:

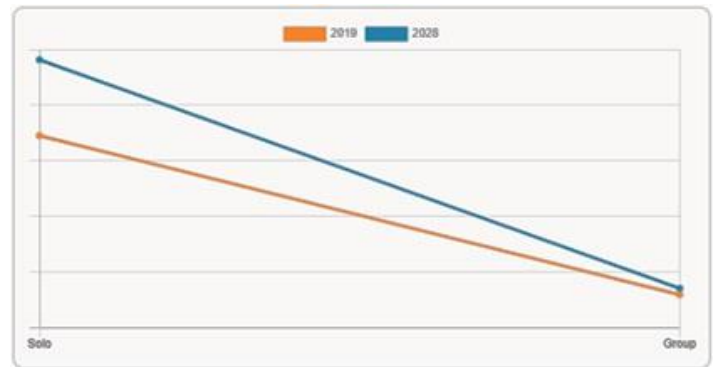
A single or double sleepbox that includes a bed (or, if it's a double, two beds) plus a desk area. Reading lamps, WiFi, and power outlets are also included in SleepBox accommodations. The cabins offer tinted window coverings for privacy and soundproofing.

Types based on different category

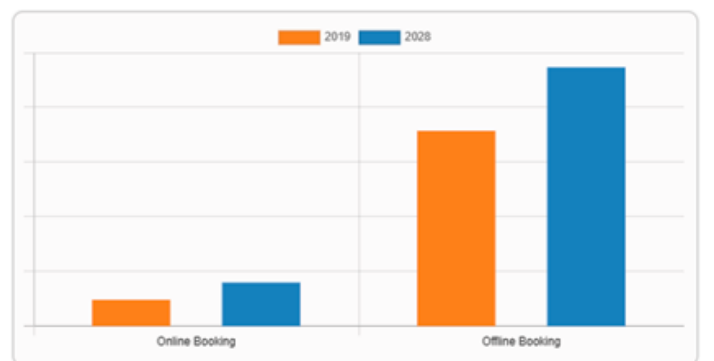
- Based on type of users : age
- Based on stay hours : less than 24hrs or more than 24hr
- Based on cost : budget friendly and luxury
- Based on module : compact pod, single pod, shared pod
- Based on travel : airport, railway station

The global capsule hotel market is segmented into traveler type booking mode age group and region.

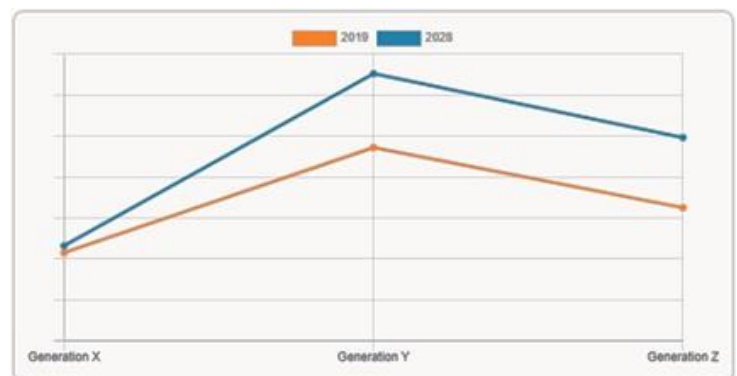
- By traveler type the market is classified into solo and group.
- By booking mode its divided into offline and online booking.
- By age group the market is segregated into different generation.
- By region its different for different area of use.



Graph 1



Graph 2



Graph 3

5. Literature Study

5.1 9 Hour hotel in Tokyo



Fig -1 : 9 Hour hotel in Tokyo

We will discuss an actual capsule hotel in Japan in this case study. The building itself is nine floors tall and houses 125 capsules as well as locker facilities, showers, and a lounge. It is known as NINE HOURS (9H). It was inaugurated on December 9th, 2009, and is situated in Kyoto's city centre. The hostel's name, core concept, and most fundamental arrangement are all indicated by its philosophy: 9 hours: 1 hour to shower, 7 hours to sleep, and 1 hour to relax.

Like other capsule hotels, this one is used by guests to stay, sleep, and depart quickly. This is what makes capsule hotels distinctive.

In the Shimogyo-Ku neighbourhood, the 125-room 9 Hours Capsule Hotel is located within five minutes on foot from Kawaramachi Train Station. The short-stay single-bed capsule rooms draw a peculiar mix of business travellers, lone travellers on the go, and nightclubgoers. Men's and women's floors are separated by numbered pods that border the corridor-style bedrooms. The necessities are all present in the communal restrooms, including hair dryers, tiny lockers, and contemporary showers. The accommodations are simple, with no televisions and little linen, but they come with complimentary Wi-Fi and toiletries. Remember that if you are staying more than one night, you must check out and check in again that evening. For a quick layover or to swiftly see the neighbouring temples, this inexpensive hotel is OK, but visitors who want traditional accommodations may want to check out the Ibis Styles Kyoto Station. This initiative establishes a new benchmark for capsule hotels. Thus, a brand-new type of capsule hotel that reinvents its traditional image and pursues functionality while also offering a luxurious stay was created. To reduce the stress of downtimes, such as the interval between showering and sleeping or between getting ready and leaving the house, the moist spaces are specifically made more livable. In order to do this, the formerly separate locker, washing, shower, and restroom rooms are linked together into a single sequence, and a lounge function is added to this connected space to create a roomy "sanitary lounge." The "reception," "prologue corridor," "sanitary lounge," and "sleeping pod" spaces make up the four stages of the capsule hotel's stay, which are divided into four scenes. We were able to create a functional hotel that is also full of the pleasures of the hotel stay, from the "welcoming" to the "excitement," "relaxation," and "ultimate sleep experience," by choosing the colours, materials, and lighting that were most suited for each of these purposes.

Lobby area

Here, guests check in and can change into new clothes and shoes. Simple figures and arrows that point to each place serve as the guiding signs painted on the ground.

Shower area

Customers must clean themselves in the shower after putting their shoes and clothing in the locker, and then they must put on the unifying cloth to access the common room and sleeping area.

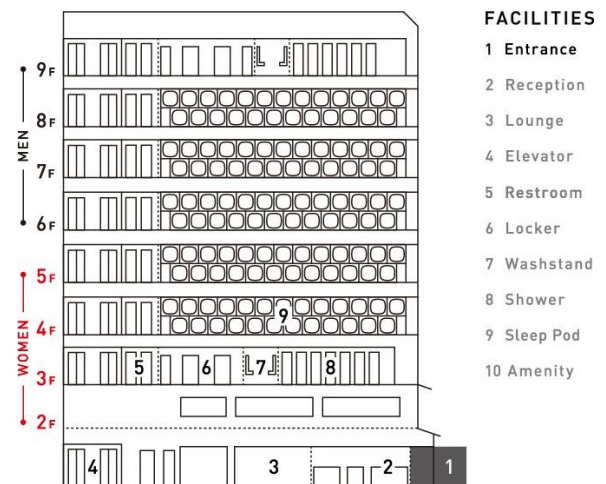


Fig -2 : Elevation

General area

The first and second floors are generally used for eating, relaxing, and working by those who may require WI-FI.

Sleeping area

The sleeping area makes up a large portion of the 9h capsule hotel; the numbers of the sleeping capsule units are painted on the ground and there is an arrow pointing to each one with the unit number.

5.1.1 WORKING OF THE 9 HOUR HOTEL

Inside the Capsule Hotel:

You may already see a peek of the amazing design that unites all 9 Hours Capsule Hotels as you walk in. The reception area consists only of a desk, and the staff is kind while moving through check-in and any queries you might have quickly.

You will receive a little bag containing pyjamas, towels, slippers, and a toothbrush. Once more, only the necessities, plus the slippers since shoes are not permitted once you approach the interior regions.

The Facilities:

Every guest has access to a locker. Before entering, place all of your personal stuff here. They have room for a medium-sized or even large suitcase.

Showers and scented toiletries like shampoo, conditioner, and body wash are available in the bathrooms. Additionally, there are lots of Showers and Toilets, as well as Hairdryers. Another thing we appreciate is how spotlessly clean all the facilities are, along with the ideal shower pressure.

The Sleeping Pods:

The Pods themselves are simple in design. The only items you will find when you first arrive are a blanket and their branded pillow, both of which are for sale. One USB dock, a knob to lower the light, and a speaker for ocean sound are all found on the little dashboard at the end of the capsule. Additionally, two little alcoves are available for storing small objects like your phone.

Each capsule has both heating and cooling. The only issue is that you might want to bring earplugs if you have trouble falling asleep. Despite the fact that most people are respectful, there is a chance that you will hear a person enter or an unusual alarm going off in the morning.

6. Survey Report

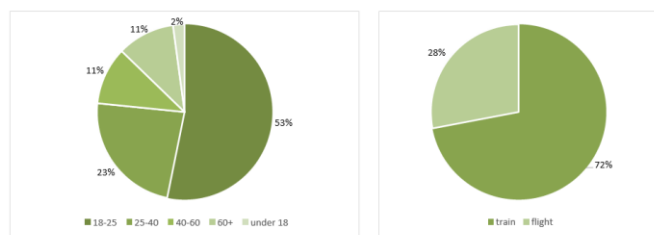


Chart 1

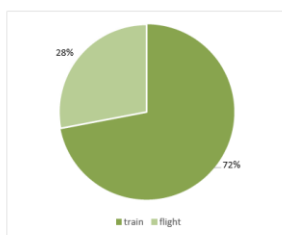


Chart 2

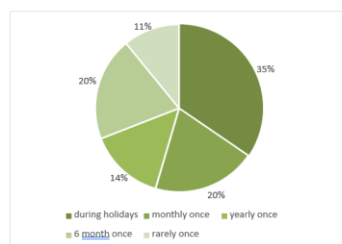


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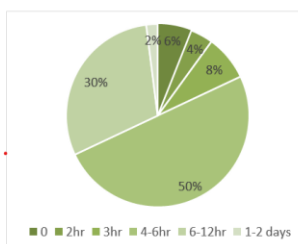


Chart 4

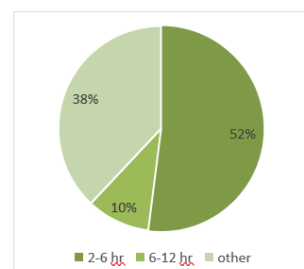


Chart 5

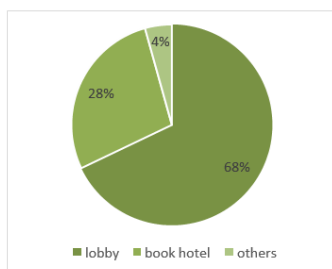


Chart 6

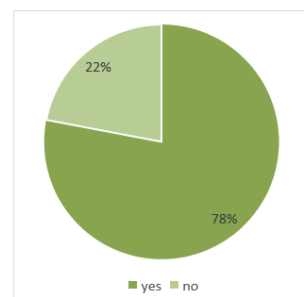


Chart 7

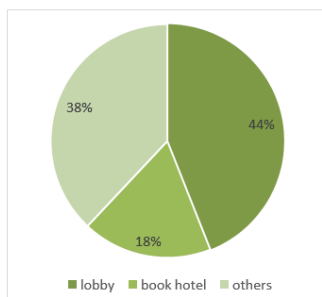


Chart 8

The survey was taken in online mode through google forms the questions asked are

1. Name
2. Age
3. Occupation
4. What kind of travel you do? – train or flight
5. How often would you travel in train or flight?
6. How many hours of travel would you travel?
7. Place of journey – from where to where?
8. Do you wait for transit flight or train?
9. Reason for travel
10. How many hours would you wait for the transit vehicle?
11. Where would you stay during waiting?
12. If stay in hotel room how much would you pay?
13. Would you prefer sleeping pod in airport and railway station?
14. Amenities you needed for stay during waiting
15. Problem faced during travel

<https://surveyheart.com/form/636fc43128b7337c5588978a>
(form link)

7. Conclusion

By taking this survey we could find the need, requirements off public

- From chart 1 we can see those youngsters between the age of 18 – 25 and 25- 40 who are either students or working peoples travel most.

- From chart 2 we know that people movement in railway station is more when compared to airports

- From chart 3 its clearly seen that people traffic would be more during holiday time

- In chart 4 we know that people generally travel for 4 to 6 hours is more when compared to more or less time of travel.

- The chart 5 shows the waiting hour of people for a transit vehicle, it starts from minimum 2hr to maximum 2 days. But looking at the pie chart waiting for 2-6 hrs. is common.

- From chart 6 we can clearly see that most of the people stay in the lobby or platform till the flight or train comes.

- Where as we can look that if people book hotels, they spend 1000-10000 on an average.

- From chart 7 we can find that almost 80 % of the people prefer sleeping pod.

- Thus, from this report, through literature studies we can understand the working principle and passenger traffic in airport and railway station through which we can find the problems and importance of sleeping pods.

- Through this survey we can clearly find out the problems faced by passengers and their need during waiting time.

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