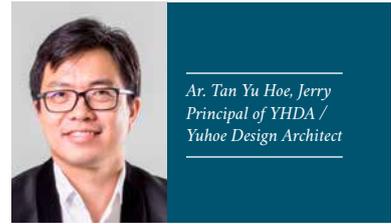


Are small apartment units still viable beyond Covid-19?



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Design strategies for a 500-sq-ft housing unit in an era when space is a premium.

Up until just before the COVID-19 pandemic, the residential housing trend has been to reduce unit sizes, with just enough space for a living room seating arrangement, a dining table, a small kitchen, and a sleeping area. This is due mainly to the desire to produce affordable homes to offset the rising land value and construction costs; as well as the changing demographics, societal structure, and economic level in response to urban living.

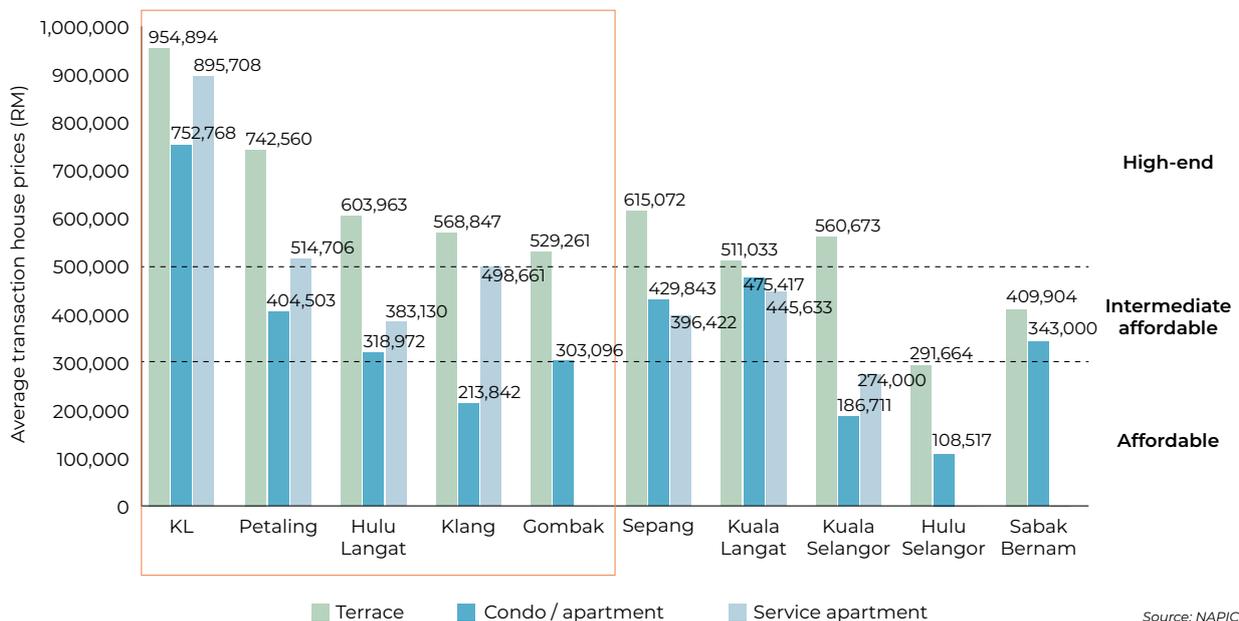
However, life has been changing ever since the virus outbreak. Concerns among house buyers when selecting a house are no longer limited to its location and accessibility, but also include the availability of space that can accommodate more functions and services.

This is because homes which used to be a place for people to rush back to after work, have been serving as makeshift workplaces, schools, gyms, playgrounds, social spaces, etc. during the pandemic.

Lockdowns to contain the spread of the virus opened people’s eyes to recognizing how important spaces in homes are to their mental health and wellbeing, particularly for those who are trapped in overcrowded homes.

One realizes that extra spaces for “study corner” aka “home office corner” may require essentials such as a retractable green screen background for video conferencing, a closet build-out option that includes space for a printer and office supplies, or an enclosed environment with good sound isolation that provides privacy and ‘me-time’.

Fig 1: Average transaction house price (RM) by housing types in Kuala Lumpur and Selangor



Source: NAPIC

Clearly, the need for more spaces could curtail the rapid emerging trend of small apartment units as they are boxed in by fixed and rigid surroundings. Landed properties, on the other hand, possess more leeway to make spaces more functional and fluid to accommodate the temporary and sometimes ad hoc activities.

Furthermore, small apartments tend to be associated with increasing vulnerability to the pandemic, while landed properties facilitate social distancing. Recent sales performance of newly launched housing products also indicated that low density suburban landed properties with less congested communal spaces, pocket parks, and spacious layouts are preferred over densely populated residential high rises.

A question of price

However, larger spaces means higher prices, which poses a challenge for housing affordability. Unfortunately, a bigger terrace house in the outskirts is still out of reach for many middle-class wage earners, as their income still could not afford it. Therefore, small apartment units are still viable beyond COVID-19.

Fig 1 shows the average transaction house prices for three common mass housing types (terraced, condo/apartment, and serviced apartment) in Kuala Lumpur and Selangor, which are derived from the 3Q2020 state level property transaction volume and value.

By benchmarking the house prices with the affordability level: affordable (RM300k and below), intermediate affordable (RM300k – RM500k), and high-end (RM500k and above); one can find that terraced houses are basically priced at the high-end level, and their prices are only considered affordable when located in the Hulu Selangor district.

High-rise properties such as condo/apartment and serviced apartment are mainly priced at the affordable and intermediate affordable level, except for those located in Kuala Lumpur.

Vertical housing dominates

Obviously, there aren't many housing options left for house buyers in a highly urbanized region like Klang Valley. Densely populated vertical living will still be the dominant house type, given that this is the only housing solution that offers convenience, social-connectivity, flexibility, and affordability, which are all in-demand features in an

urban environment.

Hence, the design for small apartment units, in the post pandemic era, should be directed towards making the most of spaces, yet providing meaningful personal space among the occupants.

With more people than ever working from home (WFH), and the likelihood that many businesses will continue to embrace remote working in the future, flexible interiors will play an important role in small unit design.

Consider, for example, the versatility of space in the housing design of an ordinary 500-sq-ft serviced apartment unit i.e. a basic unit complete with essential utilities, minimum internal wall or divider, and a semi-outdoor activity zone (Fig 2).

A versatile space could facilitate diverse functions without making any physical changes to the size and structure of the unit; which is the opposite of a unitary space that emphasizes on function zoning (bedroom, living room, dining area, and study room/corner), and hence, could not accommodate multiple functions.

With just simple partitions and carpentry works, a versatile layout can be turned into a single conventional family-oriented home that comprises a dining + living room, a master bedroom, a study room, a small kitchenette, and a bathroom (Fig 2).

Or, by adding a wall in the middle of the plan, it can be converted into two "smaller units", with a size of about 250 sq ft each, featuring an "enclosed studio residence" and a "home office". Such an arrangement not only enables the owner to stay full focused while working, but also allows him/her to enjoy his/her own privacy at the same time,

Fig 2: Small apartment unit (500ft²) with versatile layout



3D VIEW

2D VIEW



Fig 3: Flexibility of a versatile layout

as it provides a separate space to meet with clients and colleagues without entering the main home.

Similarly, by adding an additional toilet pot, it can be converted into two independent units with separate functions. Normally, this can only be accomplished by a dual-key unit; which is 3% to 5% bigger – in terms of floor area – than a regular condo unit; which, in turn, gives rise to the problem of affordability.

However, this is made possible even in a 500-sq-ft small unit by having a versatile layout. Apart from that, when it comes to reselling a dual-key unit, the number of buyers may not be as high as buyers looking for a normal sized apartment, due to its very niche market. In this sense, a small unit with versatile layout can even perform better, as it is affordable yet adaptable to the needs of the buyers.

Realizing that the biggest problem with a small apartment unit is the limited physical space, every corner of the unit has to be designed and configured in a way to increase a sense of spaciousness. For instance, tall ceiling heights of 10 feet can definitely create a sense of volume to counteract the small square footage of the unit.

Since enough light and air penetration can also help in making small units feel bigger than they are, it is critical to use oversized (six to eight feet high) operable windows to compensate for smaller size unit, or bay windows to provide more light to the unit yet can function as an extra seating area (Figure 4).

When people are not allowed to freely mingle around at outdoor spaces during the lockdown, it becomes an urgent issue on how to make their compact homes feel more outdoor-ish.

It becomes depressing to stay at home, especially in high-rise living, without any access to external environment within the unit for a long period of time. While a balcony is considered too expensive for a small apartment unit, a Juliet balcony can work just fine to allow residents to open their units to the outdoors, without any area increment.

Imagine, your living space is covered but open-sided, enabling you to welcome daylight and fresh air in a sunny day without needing to switch on the air-conditioning. The living space too can become an active zone for exercising and various activities that are possible within confined spaces.

Storage is also critical in making small units livable. It is, hence, necessary to include built-in or flexible furniture systems to make the 500-sq-ft unit functional. For example, seating with storage below, a fold-down wall bed, a floor-to-ceiling built-in vertical shelving or wardrobe, can definitely remove the need for residents to bring large furniture with them, thereby allowing more spaces to be allocated to a bedroom or living room. Meanwhile, the lack of space in the unit can also be

compensated by providing more amenity spaces in the common area such as reading area, multi-purpose hall, catering kitchens, cybercafé, gym, playground, etc.

For those with a yen for gardening, it is timely to look at hydroponic or aquaponics for high-rise living. The presence of green spaces facilitates good well-being.

While having a pocket park is an advantage for landed properties, a vertical wall in

high-rise residences can be allocated for hydroponic planting. Such a 'built-in' provision is especially worth taking for any housing design especially if it does not add too much to the cost.

Moreover, the requirements are straightforward - early design incorporation, waterproofing and water discharge. It is probably very welcomed by the property purchasers and can be a selling point for developers too. **APR**

Fig 4: Design strategies to increase spaciousness



Bay windows



Operable windows



Juliet balcony



Under-couch storage



A fold-down wall bed



Built-in vertical shelving / wardrobe