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Relocating and Resizing Strategy for Shop House Area to Build Resiliency in Dealing with New Normal

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Abstract

Covid-19 pandemic has dramatically impacted performance and demand in the retail-shopping sub-sector. All trading activities have mostly gone into online activity to comply with safety measure protocols. In the long run, this situation will impact the tourism sector as certain areas rely on the role of shop houses as their economic driver. As the new normal requires people to be able to coexist with Covid-19, many retail-shopping areas should review their strategies and work patterns. One of them is applying relocating and resizing strategies to shop houses. Relocating and resizing the shop houses means to review the spaces, reconsider open and enclosed spaces, as well as create a flexible space that prioritizes vitality in order to increase space effectiveness that is safe for shop customers and shop-owners. This research is conducted in the Pasar Lama Tangerang area and the research method is done through field observation as well as literature studies. Through this research, the authors obtain certain criteria that meet relocating and resizing strategies to increase effectiveness and improve the shop-houses' performance to build resilience in the tourism sector.

Keywords: Shop Houses, Pasar Lama, Flexible Space, Relocating and Resizing.

I. INTRODUCTION

Covid-19 pandemic has dramatically impacted performance and demand in the retail-shopping subsector. City-dwellers are no longer going to the store by themselves, but relying on all the online activity. We are currently in the middle of an unprecedented restriction in the use of public areas as the population have to maintain safety measure protocols. Cities well-known for their active street life such as New York, Rome or Barcelona now appear ghostly as the population stays home for the collective public good [1].

Over the past few months, there are various stories from different countries about how the pandemic changes people's behavior and ways to adapt to the new normal. Some people have to experience full lock down in one country while some people have started to reopen stores and public facilities. Therefore, many retail shopping-areas have to review their strategies and create new work patterns in order to strengthen certain area's economic that rely on retail-shopping subsectors as one of the area's revenue. Although we could not be more sure of what the future will look like, we can examine and predict the thing that has been the current trend these days that plays a great role in facing new normal.

This research is conducted in Pasar Lama which is one of the most visited areas and also a favourite tourist spot in Tangerang City. The whole area was filled by row of shop houses and has become the economic driver as this area is always filled with tourist crowds even in the night. Now, Pasar Lama are almost entirely free of people. Tourism ground to halt when covid-19 started to spread in Indonesia. Restaurants, shopping and entertainment centers have all been ordered to close. However, this situation will not last for long as the recovery phase of covid-19 crisis starts unfolding for business. Everyday life has come to resemble the way it was before.

Now, the question is how to deal with the new reality when it requires people to be able to coexist with covid-19? How will these shop houses manage to restart the whole operation and keep life like it was before? This paper tries to observe the system applied in Pasar Lama's shop house area so that the author obtains certain criteria that meet the strategy to regain and increase effectiveness. Furthermore, this effectiveness could improve the shop houses' performance to build resilience in the tourism sector.

II. LITERATURE REVIEW

A. Row of Shop Houses

Shop House

Shop house is a form of building in a hybrid urban combining commercial and residential functions [2]. The concept that combines two functions makes the shop house have a different typology than any other building. The spatial formation for the shop house is marked by the side elevation that is longer than the front elevation, forming a rectangular as the plan characteristic and causes the shop house to be classified as low rise building. Narrow land plots, where the shop house was built, have a tendency to be unable to accommodate building heights exceeding six floors [3]. In the development phase, shop houses are constructed side by side simultaneously. The placement of shop houses are elongated filling a straight line on the side of the road space, creating a line of commercial area on the ground floor [4].

Shop Houses Typology

In China and Southeast Asia, the typology of shop houses is classified based on the repetitive pattern of shop houses‘ placement and the road space’s pattern. This category produces four typologies of shop houses, namely banded type, tree type, enclosed type and compounded type [4].

a. Banded Type

Shop houses are placed in a row of linear system with the front elevation facing the main road and the side of shop houses are attached to each other. This row of shop houses can be placed in one row or two parallel rows that face each other which forms a harmonious unity. For an example, see Figure 1.

b. Tree Type

Tree type is the extended pattern from the basic form of banded type based on the analogy of a tree. Imagine a tree with a big trunk as the main road and the branches as the secondary road. This type will form nodes or intersections as a result of two or more road spaces that meet each other as shown in Figure 1. Tree types have more rows of shop houses than banded types.

c. Enclosed Type

Based on the existing road, enclosed type dividing the shop houses into a closed cluster as shown in Figure 1. The entrance to the commercial area are facing the main road while the entrance to the living area can be reached through the inside space formed by the closed cluster.

d. Compounded Type

Compounded type is the extended pattern of enclosed type. The difference is there might be a combination of two or more settlements in the second floor between the shop houses in one cluster.

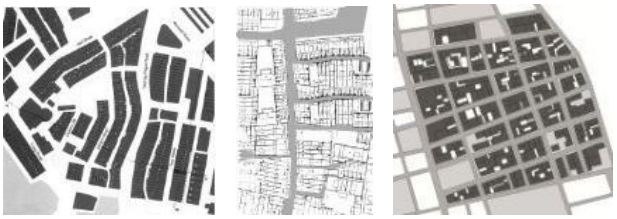

Fig. 1. Banded Type (Left), Tree Type (Middle), Enclosed & Compounded Type (Right). Source: Han & Beisi, 2015

Unit of Shop House

In the life of shop houses, working and living activities occur under one roof [2]. Shop house that has two main functions provide different spaces for residents to live and work at the same time. The use of the term work-live supports the concept of a sustainable community, minimizing the carbon footprint thereby reducing the use of vehicles [3] and defining clear boundaries between visitor and shop owner's area. However, merging commercial with residential areas means that there should be a consideration about the level of noise, odor and other impacts that might be caused by the work activities [5]. Marina Khoury [6] explained that there are four types of work-live units, which are, the Live-Within, Live-Above, Live-Behind and Live-in-Front Type with different room layouts that can be seen in Figure 2. These can be applied to shop houses except the Live-in-Front type. The characteristics of each type can be seen in Table 1.

Table 1. *Work-Live* Unit's Characteristic

Unit Type	Visitor	Individual / Group	Produce Odor	Produce Noise	Use of Dangerous Tools
Live-Within	Client Visit by Appointment	Individual	No	No	No
Live-Above	Walk-in-Trade	Group	Yes	Yes	No

	Client Visit by Appointment (in commercial area)				
Live-Behind	Walk-in-Trade	Group	Yes	Yes	No
	Client Visit by Appointment (in residential area)				

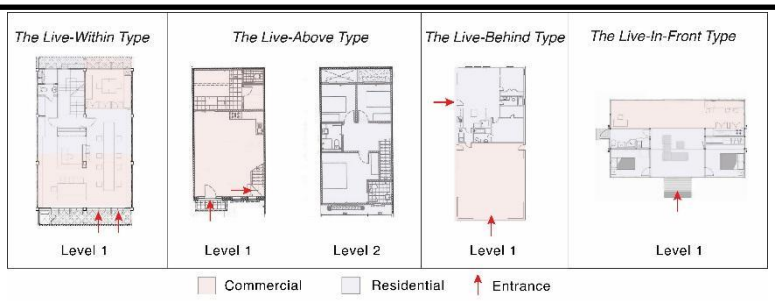

Fig. 2. *Work-Live* Unit's Layout

Commercial Type in A Shop House

The example of different types of commercial work-live units are taken from Haji Lane Shop Houses in Singapura [7] and Pasar Lama Shop Houses in Tangerang City, Indonesia as shown in Table 2.

Table 2. The Diverse of Commercial Types

Types	Variables
Fashion	Clothing, textiles, fabrics, cosmetics and jewelry
Food and Beverage	Restaurant, cafe, food and beverage stall, raw and food ingredients
Art and Sculpture	Painting, sculpture, stationery, art utensils
Service	Printing, maintenance and repair of automotive

	and electronics, salon, massage
Retail	Drug store, optics, household appliances and furniture, daily life
Office	product

The whole part of the shop house is rendered to be the site of every facet of life, from rest and sustenance to work and entertainment. Therefore, knowing the whole part will be beneficial to increase effectiveness and improve the shop house's performance.

B. Flexible Space to Relocating and Resizing

Relocating and resizing strategy aims to face current conditions and prepare for post covid-19 such as phasing in new normal, business recovery and adapt business model. In response given this unprecedented reality, Australian architectural practice Woods Bagot [8] has developed a modular system to support a range of activities throughout the day through managing the spatial flexibility as shown in Figure 3. These three different modes produce certain locations based on homeowners tasks and activities. Bagot called this term as resilient homes as well as flexible space. Whether covid-19 or not, this system will grow the flexibility as many individuals desire in determining where they work, live and play.

Fig. 3. Three Different Mode Arrangement in One Open-Plan. Source: Bagot, 2020.

III. RESEARCH METHOD (CASE STUDY: PASAR LAMA, TANGERANG CITY)

A. Study of Shop Houses in Pasar Lama, Tangerang City

Pasar Lama is an ever-active urban center which has a unique identity as a historical area located in Tangerang City, Banten Province as shown in Figure 4.

Fig. 4. The map of Pasar Lama, Tangerang City

The exact site area to be observed is located on Kiasnawi Road of Sukarasa Sub-District in Tangerang City. The east boundary is Al-Ittihad Grand Mosque and the south boundary is Tangerang Station. The area consists of two rows of shop houses, a 200 m main road and three nodes so it was classified as tree type.

Based on the field observation, there are six commercial types that exist in these two rows of shophouses with a total of 77 buildings as shown in Figure 5. The chart shows the number of existing commercial types and it can be seen that the highest commercial use is service while the lowest is the use of office. Meanwhile, each of the units have the same room layout (in the size of 4 x 12 m) while some of the shop owners re-layouting their shop according to their needs. The total of floors that each shop has in this area varies, ranging between two until five different levels.

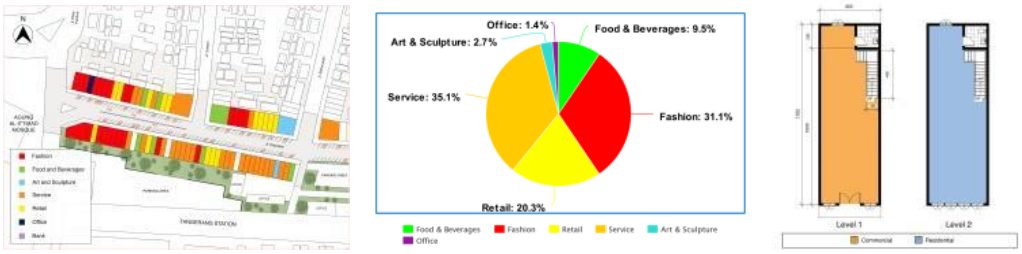

Fig. 5. Commercial Types in Pasar Lama Shop Houses (Left & Middle), Shop House's Layout (Right)

B. Result

Shop House's Analysis in Pasar Lama Tangerang Area

Each of the shop house's commercial types in Pasar Lama can be linked to the work-live unit characteristic and is described in Table 3. As mentioned before, the type of visitor from each commercial also affects which work-live unit they were categorized. Fashion categorized as live-behind since there are walk-in trades who can enter the ground floor front area and client visits by appointment who can enter the rear area of residential for special occasions such as workshops or exhibitions. Meanwhile, offices are categorized as live-within since they only accept client visits by appointment as well as other commercial types that are categorized as live-above.

Table 3. *Work-Live* Unit in Pasar Lama's Shop House Area

Commercial Types		Individual / Group	Produce Odor	Produce Noise	Use of Dangerous Tools	Unit *Work-Live*
Fashion	Boutique	Group	No	No	No	*Live-Behind*
	Shoe Shop	Group	No	No	No	*Live-Behind*
Food& Beverages	Restaurant	Group	Yes	Yes	No	*Live-Above*
	Grocery Store	Group	No	No	No	*Live-Above*
	Mini Market	Group	No	No	No	*Live-Above*
Art & Sculpture	Stationary Shop	Group	No	No	No	*Live-Above*
		Group	No	Yes	No	*Live-Above*
Service	Print Shop	Group	Yes	Yes	No	*Live-Above*
	Salon	Group	Yes	Yes	Yes	*Live-Above*
	Vehicle Reparation	Group	No	Yes	No	*Live-Above*
Retail	Household Appliances	Group	No	No	No	*Live-Above*
	Optic	Group	No	No	No	*Live-Above*
	Toy Shop	Individual	No	No	No	*Live-Within*
Office	Convection					

Analysis on Table 3 is beneficial to provide alternatives on how to manage and utilize a shop house completely if it is built based on their daily work activities. It can also give clear boundaries between the shop owners and visitors to increase residential security and safety during covid-19. This alternative will be covered and reviewed in concept design development.

Concept Design Development

As described in Table 3, work-live unit type on each shop house can be developed through relocating and resizing strategy in order to create a new work pattern and regain new strategy in facing new normal.

Live-Above and Live-Behind type distinguished entrance access, one for visitors and one for the shop-owner, as shown in Figure 6 and Figure 7. This effort aims to increase security and safety including hygiene awareness for both of them. The making of green areas in each type (including Live-Within in Figure 8) will improve air circulation. As we know, shop houses nowadays are starting to neglect the importance of green areas. The amount of openness within four walls will provide a good cross ventilation.

Fig. 6. *Live-Above* Unit Plan

Fig. 7. *Live-Behind* Unit Plan

Fig. 8. *Live-Within* Unit Plan

Fig. 9. Alternative Unit Plan (*Live-Above* left; *Live-Behind* middle; *Live-Within* right)

For some commercial types that are related to product selling, in order to survive, they shift their business model from offline store to online store. The physical store experience has become the secondary thing since the primary focus for the consumer is the internet. According to the Global Consumer Insights Survey 2020 by PricewaterhouseCoopers (PwC), 69 percent of the Indonesian respondents stated that they were buying more groceries online following the implementation of social restrictions to contain the covid-19 outbreak [9]. On the other hand, only 42 percent of the consumers still remain shopped in-store this year, indicating that in-store shopping is now less preferred for daily shopping.

Following up to the statement above, offline to online store transformation means the hall area, used for the shop, in the ground level of the shop house is no longer used. The new strategy that can be applied is by inserting a series of adjustable walls and screens that would be used to divide an open plan shop into various dedicated spaces.

The other implementation is to divide one big space into several small spaces that can be used for each family members‘ needs. It might be designed as a nice workspace for one parent while the children is having their own play space, for an example see Figure 9. When the working hour ends, the movable walls can be removed so it will become one big space for the family room. On the other side, the hall can be transformed as a working area as well as a small-space home gym. Now, with gyms closed, people are all innovating. Maintaining a fit body is one of the requirements to have a good immune system especially during the pandemic.

For other commercial types that are related to food and beverage, a whole new set of restrictions means to minimize the spread of covid-19. Restaurant and cafe in Pasar Lama shop houses can utilize half of the pedestrian in the front area as a safer outdoor-seating to get the fresh air where covid-19 infection is less likely to occur, for an example see Figure 10. Despite that, maintaining social distancing is also a must. The use of stuffed or mannequins to ensure social distancing makes people don't sit too close together [10]. The installment of plexiglass barriers also help to section off tables and to avoid droplet exposure that can be the cause of covid-19 infection.

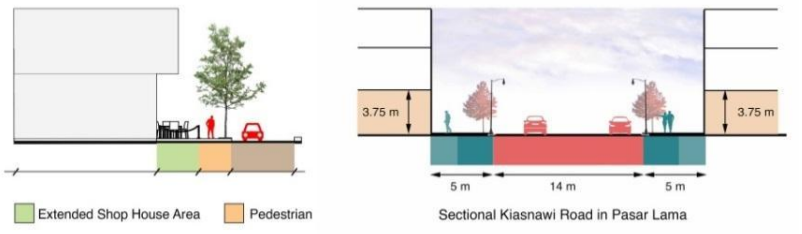

Fig. 10. Correlation Between Shop House and Road Space in Pasar Lama Shop Houses

IV. CONCLUSION

Making the most of the combination of commercial and residential functions, in the form of a shop house, will avoid performance decrease of retail-shops in facing new normal. In fact, it will establish a new strategy in dealing with new normal.

The application of flexible space by relocating and resizing strategy to shop houses has certain criterias that is linked to each other, such as layouting, producing more individual space, creating additional space including small-space home gym and also utilising outdoor space has been the main things in dealing with new normal. It increases the effectiveness and improves the shop houses' performance so that the retail-shopping subsector will remain alive. In the long run, this situation helps to build resilience in the tourism sector.

V. ACKNOWLEDGMENTS

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