Sustainability of the informal sector space in urban areas in the post-covid-19 pandemic

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Abstract. The informal sector retailers in Indonesia are considered problems in the urban public spaces and a disturbance of comfort, traffic, views, and environmental cleanliness as a concern during the Covid-19 pandemic period. Until now, the government policies toward the retailers are in the form of eviction. In fact, these activities are actual activities that happen around urban areas, so they must be accommodated. Accommodating those activities is reinforced by its advantage that can provide a livelihood for marginalized people who have a problem due to the pandemic critical events. These activities could be sustainable in urban spaces. Their existence problems were found in Salatiga City, so it’s necessary to study the space as a place for their activities there under the pandemic period. This study aims to examine the retailers’ spaces during the pandemic in Pancasila Square Salatiga City. This study applies a quantitative approach using cross-tabulation to understand the relation of the variables between spaces and the activity characteristics of the retailers. Data was collected using observations and questionnaires. The results describe a suitable location, comfortable place, and sustainable spaces for retailers during the pandemic which will have an impact on the sustainability of the informal sector retailers in urban public spaces.

Keywords: Covid-19 pandemic, informal sector retailers, urban space, urban public space, sustainability

1. Introduction

The informal sector retailers in the urban economy have significant roles in reducing unemployment and poverty [1]. The informal sector retailers are problem solving in the employment opportunities limitation for working-age people in urban areas. The sector provides wide opportunities for unskilled or marginalized people [2], [3]. It was proved that the amount of labor in Indonesia was 62% dominated by informal sectors [4]. These sectors could provide a livelihood for the marginalized people in Covid-19 pandemic critical conditions [5]. Besides reducing unemployment and poverty, the informal sector retailers can significantly give economic opportunities and also contribute to the economy [6], [7]. The fast growth of the informal sector retailers in Indonesia can solve and facilitate the problems of people’s daily needs [6], [8]–[10].

Unfortunately, the informal sector retailer’s activities in public spaces, such as; roadside, sidewalks, parks, stadiums or squares can also create public space problems around the area of the public spaces [10]–[13]. The public spaces problems are orderliness disturbing, safety, comfort, environment aesthetic and cleanliness, and traffic jump [11], [14]–[16]. Based on the problems mentioned before, the
government usually tries to refuse the existence of the informal sector retailers activities in urban public spaces because they are considered as out of place elements [17][18]. This policy turns into marginalizing things [19]. Explained that the good city planning is the planning that can accommodate all real activities in urban areas [20]. Due to the facts that the informal sector retailers are actually the people activities in an urban area, so they are needed to be placed. In contrast, Shirvani’s theory (1985) said that the informal sector retailers as the activity support that their existences in the public areas can empower them as public interactions space in urban areas [21].

The informal sector retailer discussions became the political agenda around many different global south countries, but there were limited discussions about the informal sector retailer’s activities in public spaces [22]. In fact, the informal sector retailer discussions from the point of view of spaces are basically needed since there are conflicts that happened due to the public space utilization in using them as the informal sector retailer activities [23]. So far, most of the researchers have studied about policy, economic and social aspects of the informal sector retailer [24]–[27]. That is why this research needed to study about a space aspect in the scope of informal sector space activities sustainability in urban areas. This sustainability aspect can accommodate the trader activities, minimalize conflict in space utilization, and give a positive impact on the sustainability of the informal sector retailer’s social-economic aspect.

The development phenomenon of the informal sector retailers also occurred in Salatiga City with its 196,600 population as the middle city category [28]. The development phenomenon needs to be anticipated by accommodating the informal sector retailer activities in public spaces in Salatiga City. One of the urban public spaces with many informal sector retailers is Alun-alun Pancasila or Pancasila Square area. The Salatiga government sterilized the area of Alun-alun for the informal sector retailers, then they were removed and stabilized into sidewalks and roadsides of the square area to keep them doing their selling and buying activities and not turning down their business around the area. During the Covid-19 pandemic, the informal sector retailers were still operating the business by obeying the restrictions on community activities, known as PPKM in line with the World Health Organization policies and Indonesian Health Protocol for COVID-19. Based on that, it is really important to do the research on the sustainable space of the informal sector retailers around Alun-alun Pancasila or Pancasila Square area

2. Methods
The study area for the research was the Alun-alun Pancasila area or Pancasila Square area as the center of the Salatiga city. In the middle of the area, there is a square called Alun-alun Pancasila as a public space of the city functioned as a communities activities space for doing exercises of sport, recreation, amusement or entertainment, worship or the celebration of the great day of religion, the national feast ceremony, and it is the location for the informal sector retailers in Salatiga (Figure 1). The research studied the sustainability of the informal sector retailer spaces in the urban area in Salatiga by applying the quantitative method base on retailer perceptions. The data were obtained through filling out the questionnaires done by the retailers and through doing the distribution pattern observation base on the type of trade. The respondents were all the informal retailers or traders around the Alun-alun Pancasila area or Pancasila Square within 56 traders (Table 1). The processing data used cross-tabulations to get the connection between space variables and activity characteristics variables of the traders (Table 2) and applied the analysis method by using quantitative descriptive.
Figure 1. Location of the Informal Sector Retailers in Pancasila Square, Salatiga City

Table 1. Types of Trading in Pancasila Square Area.

| Types of Trading                  | Number |
|-----------------------------------|--------|
| **In front of shops**             |        |
| **& One-Stop Administration**     |        |
| **Services Office**               |        |
| Food & Beverage                   | 16     |
| Services                          | 1      |
| **In front of The Darul Amal**    |        |
| **Mosque**                        |        |
| Food & Beverage                   | 13     |
| Toys                              | 1      |
| Fruits                            | 2      |
| **In front of The office of the** |        |
| **Salatiga Government**           |        |
| Food & Beverage                   | 11     |
| Toys                              | 1      |
| Fruits                            | 2      |
| **In front of KJITU Jemaat Salatiga Church** |        |
| Food & Beverages                  | 10     |

**Total** 56
### Table 2. Research Variables.

| Analysis of the informal sector retailers’ locations | Space Variables | Informal sector retailer characteristic Variables |
|-----------------------------------------------------|-----------------|--------------------------------------------------|
| - Location of the informal sector retailers:        |                 | Areas activities, activities time, costumers     |
| - In front of shops & One-Stop Administration       |                 | accumulation, costumers mobility pattern, space use |
|  Services Office                                    |                 |                                                  |
| - In front of The Darul Amal Mosque                 |                 |                                                  |
| - In front of The office of the Salatiga Government  |                 |                                                  |
| - In front of KJTU Jemaat Salatiga Church           |                 |                                                  |

| Analysis of the informal sector retailer places     | Place of the informal sector retailers: | Accessibility, nature elements, safety, parking spot facilities |
|-----------------------------------------------------|----------------------------------------|---------------------------------------------------------------|
| - Roadside                                           |                                        |                                                                |
| - Sidewalk                                           |                                        |                                                                |

3. The Sustainability of the Informal Sector Retailers Space Analysis in Salatiga Square

The analysis involved informal sector retailers’ location analysis, informal sector retailers’ spaces analysis and informal sector retailers’ spaces sustainability analysis.

3.1. Informal sector retailer location analysis

Informal sector traders’ activities in Salatiga square were concentrated in four locations, and they are in front of the city hall office, in front of the building shop and SAMSAT or One-stop Administration Services Office, in front of Darul Amal Mosque, and in front of KJTU Jemaat Salatiga Church. As the traders said that these locations are suitable activities for informal sector retailers which concerning some conditions as follows:

3.1.1. Areas activities

The result of the research around the Salatiga square showed that there are some office activities, such as: City government office activities; City Police Office activities; Bank office activities; One-stop Administration Services Office or SAMSAT activities; trade and services activities while there are also recreations, sport, entertainment activities inside of the square and the Informal Sector Retailers that concentrated and located in four spots, and those are (1) in front of the, City government office that are nearby office activities; recreations, sport, entertainment activities; (2) in front of the shops and the One-stop Administration Services Office or SAMSAT office which are close to the activities of trade and services, office, recreations, sport, entertainment; (3) in front of the mosque that is nearby the activities of traders, worship, offices, recreations, sports, entertainments; (4) in front of the church which is close to the activities of traders, worship, offices, recreations, sports, entertainments.

The respondents’ opinions showed that the traders choose to do the trading activities around the square because there is diversity in the main activities. These diversities caused the square area to be always visited by people around Salatiga which also caused the high visitor accumulations. These conditions can stimulate understanding for the traders that there are opportunities of having many customers for informal sector retailers [10] [23] [29]–[31]. The conditions around the square that have diversities of the main activities show that there is a compatibility between trade locations and surrounding locations with the main activities area [10] [21] [23] [31]–[33]. Figure 2.
3.1.2. Activities time

Taken from the respondents’ opinions, it was stated that the square has the main activities area and people mobilization passing by the area started in the morning to night so that the traders do their trading activities with the certain time durations: like morning to evening; afternoon to night; evening to night. It shows that trading times for the informal sector retailers follow the rhythm of the area activities, so the traders have the opportunities to get customers [10] [23] [29]–[31]. What has been done in the square area with their long trading duration time along the day shows that there is a compatibility between trade locations and the suitable environment with the time activities around the area [10], [23], [31]–[33]. (Figure 2).

![Figure 2. Areas Activities and Activities Times of the Informal Sector Retailers Locations around Pancasila Square](image)

3.1.3. Customer accumulation (due to varieties location circulation)

As stated by the respondents that there are high customers circulations and customer’s stream connection from four parts of the city. In detail the traders’ opinion in the four locations around the Salatiga square is as follows 1) in front of the city hall office there is high customers circulation; 2) in front of the shop and SAMSAT or One-stop Administration Services Office there are high customers’ circulation, stream connecting, exit and entrance part; 3) in front of the mosque there are high customers’ circulation and also exit and entrance part of the area; 4) in front of the church there is also high customers circulation. That is why it can be shown that there is high customers’ mobility around the square area, or it can be connoted that it has customers accumulation [23] [29]–[31] [34]. It also concludes that the square area has the potential for the traders to get customers. So that the informal sector retailers around the area have a connection to the trader’s characters who tend to come closers or cut down the customers path to the main activities around the area [23] [29] [30], it shows that the square area has customers’ accumulation, and it also shows that there is compatibility between trade locations and the environment and that is the customers’ accumulation in the area [23] [29] [32]. (Figure 3).
3.1.4. Costumer mobility pattern
The customer mobility pattern has a connection to customers stream to the area, costumer’s mobility inside the square area, and the customer’s purpose in coming to the informal sector retailers in the area. The retailers in the four locations explained that 1) customers stream around the area are passersby who are passing from their house to their offices; from their house to their school; or from their house to the recreation part or sports area or to the shopping place; or vice versa. Furthermore, the customers’ circulations are very high. 2) the mobility (activity) of customers on the sidewalk or inside the square are mostly customers who just want to relax or do sport or side seeing; there are also people who just pass by the area; people who really need to do the buying or selling activities; there are culinary spots; there are also people who work around the area which influence the high costumer mobility around the area; 3) the purpose of the customers to come to the area are as the main purpose or as passersby who accidentally pass the area after they visit the other point of an area, like office or school.

Based on the conditions, it shows behavior activities pattern of people in the city who pass the area and do some activities around the area, so that those customers’ mobility spaces can interact with traders to make a benefit of it as a space for informal sector retailers to do selling and buying activities [32] [33] [35]. On the other side, there are high mobility patterns around the area, and it can be connotated that there is a high mobility of the costumers inside the area, and also it gives an opportunity for the trader to get customers. There the area is utilized by the traders as their space for trading [23] [29] [30] [34]. That is why these areas are placed for doing the trading, and it can be said that there is the compatibility between location and the environment which is high customers’ mobility pattern [10] [21] [23] [31] [32] [36].(Figure 3).

![Figure 3. Costumers Accumulation, Costumers Mobility Pattern and Space Use of the Informal Sector retailers Locations around Pancasila Square](image)

3.1.5. Space use
The majority opinion of the retailers around the area is that the utilized space must be permanent. The permanent spot of spaces is needed because there are many customers coming and the retailers can do the business of trading throughout the day to get many customers. It can be connected to the government policy of allowing the informal sector retailers to do the business there, so that the traders will save and not have to worry about being evicted. These condition shows that there is a compatibility between the
location and the environment where one can use the space permanently with the government permissions [10] [21] [23] [31] [35] [36]. (Figure 3).

3.2. Informal sector retailers traders places analysis

The liveable and comfortable places of the square for the informal sector retailers fulfill some following considerations.

3.2.1. Accessibilities

As stated by the traders in the four locations around the square, trader spots on the sidewalk and roadside have good accessibilities because they can be reached easily by the customers. Moreover, the spots are not blocked by the other activities or buildings, but there is a very clear view. This condition can attract traders to utilize public spaces around the square for their business, as according to Shirvani’s theory (1985) that to easily get the object, it must be easily seen and accessed [21]. Besides that, the traders around the area are located in public spaces which shows the informal sector retailer’s characteristics by crossing the customers who will get their access to main activities around the area [23] [29]–[31] [34]. The good accessibilities spots and easy crossing the customer can provide the assumption that the square area is the most comfortable and livable place for the informal sector retailer’s activities. (Figure 4).

3.2.2. Nature element

As what the traders explained that the area around the four locations have very shady spots with big trees and some shelters with light spot coming from the electricity for night activity, and there are open spaces. The comfortable and shady conditions can attract people to come and enjoy the place for their activities and hanging around [32]. Moreover, the traders and the customers can feel cool and comfortable because the spots are very open place at noon. Besides that, during the night, the places are still lit with electric light. These comfy conditions are utilized by the traders to open their opportunities for trading activities around the area that is considered livable places for the trader’s activities based on their characteristics [21]. Figure 4.

![Figure 4. Accessibilities and Nature Elements of the Informal Sector Retailers Places around Pancasila Square](image-url)
3.2.3. The safety of space
All the traders have an argument that the areas around the square location are allowed by the government to do the business activities there, and they do the business on the sidewalk or roadside, but the location inside the square is a forbidden place for the business activities. The informal sector retailers who did the business inside the square were stabilized into the sidewalk in front of the church and the city government office. That is the way the traders utilized the area of sidewalk for doing their business because they have a secure feeling about their activities without being evicted. Therefore, the government permission for doing business creates a sense of secure and comfortable zone [21]. Moreover, the permission of the government accommodated informal sector retailer activities around the square area and it shows that the activities become in place element around the area [17] [18] [23] [34]. The safe and comfortable spots are utilized by them for doing their business then it shows livable places [21] [31] [34] (Figure 5).

3.2.4. The availability of parking spot facilities
All the traders in the four locations around the square explained that there are no special spaces available for the parking lots for the customers when they come to the area, but as a solution the customers use the parking lots are around the shops, in front of a mosque or on the roadside which is located nearby the choice traders, and soon they leave the area after the finish their order. These conditions show that there is no problem with the parking condition occurring around the area, since the customers can park their vehicles on the roadside, in front of the shops or in front of the mosque. Therefore the traders assumed that the areas around the square are livable places for doing their business [21] [23] [31] (Figure 5).

![Figure 5. Safety of Space and Availability of Parking Spots of the Informal Sector Retailers Places around Pancasila Square](image)

3.3. Informal sector retailers space sustainability analysis
Based on the location and the informal sector retailers trading places analyses around the Pancasila square, there are compatible spaces around the four locations because there are also costumers
populations, the trader spaces that are utilized by them to do the selling business, easy access for the customers, and the customers mobility which shows that square area is sustainability spaces since it fulfills the neighborhood sustainability indicators [37]. Besides that, the trading space on sidewalks and roadside are liveable places because there are space arrangements and open space area which can get much sun rays and natural air circulation. Furthermore, those areas fulfill urban design sustainable indicators in a sustainable city [38], and the traders still had selling business around it during the pandemic with the government permission, so that it is a sustainable space for the informal sector retailers in doing the trading there.

4. Conclusion
Based on the analysis above, the areas around the Pancasila square in Salatiga City are the sustainable spaces as places for the informal sector retailers’ activities in the post pandemic Covid-19. These sustainability spaces which are based on the compatibility between the area and the environment have varieties of main activities, time activities, customer accumulation in the area, customer’s mobility, and permission spots and can be used permanently by the traders. Besides that, the areas around the square are a liveable place for them doing their business. It is shown by easily accessible places, by the customers, shady places, and safety places (the place that has the government permission for trading) even though there are no special parking lot available for the customers and the traders. The compatible locations and liveable places of the areas around the square make these locations and places become sustainable spaces for the informal sector retailers’ activities in Salatiga City.

Acknowledgments
This research was financially supported by the Faculty of Engineering, Diponegoro University, Indonesia, through Strategic Research Grant 2022. The authors sincerely appreciate all the informal sector retailers in Alun-alun Pancasila Kota Salatiga for their participation. The authors also appriciate Dr-Ing. Wakhidah Kurniwati, ST, MT for the participation and recommendation for this paper.

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