

## Study of Imageability in the Pajak Ikan Lama Medan

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### ABSTRACT

The Pajak Ikan Lama area is one of the old town commercial areas in Medan City that has a row of Chinatown shophouse buildings with various local trading activities. The rapid economic growth and modernization in this area is feared to have an impact on the physical aspects and spatial quality of the area that does not show its concept and aesthetics as an old town commercial area. The irregularity of activities that occur in this area also affects the condition of visitors in observing and understanding this area. These problems affect the imageability of the Pajak Ikan Lama area. The purpose of this research is to examine the formation of imageability of the Pajak Ikan Lama area based on its supporting qualities, such as legibility, enclosure, human scale, complexity, coherence, linkage, and transparency. The method used in this research is descriptive qualitative with case study research type. The results of this study indicate that the imageability of the Pajak Ikan Lama area has not been fully formed based on these qualities, so it still needs to be evaluated based on good imageability criteria.

**Keywords:** imageability, commercial area, Pajak Ikan Lama



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## 1. Introduction

Medan City is the capital of North Sumatra province, one of the large cities in Indonesia, which is developing rapidly as a city for tourist visits. The image and atmosphere of the City is one of the attractions for visiting tourists, the impression displayed can be seen through the historical buildings [1]. Several areas in Medan City have unique characteristics that are immediately recognizable, such as the European colonial building area in the Kesawan area and the Chinatown shophouse building area in the Pajak Ikan Lama area, which invites tourists to visit and set tourist destinations.

Some of the tourist destinations in Medan City are trade and service activities. It can be found in several commercial areas that have existed for a long time, such as the Pajak Ikan Lama area. The Pajak Ikan Lama area located in Kesawan is a trading area that was opened in 1890 by a Medan conglomerate of Chinese descent, Tjong A Fie [2]. This area is one of the commercial areas in the center of Medan City, known as the Central Business District [3]. This area is the driving force of trade and commercial activities in Medan City, with Perniagaan Street and Kereta Api Street as the lanes in the area, where land use is dominated by shophouse buildings with the main activity being trade activities.

The Pajak Ikan Lama area consists of a variety of activities. With different activity characters, so does the character of the users. The users involved come from various regions and circles. The behavior patterns of these users will vary according to the purpose of the visit, their condition when visiting, and the physical aspects where

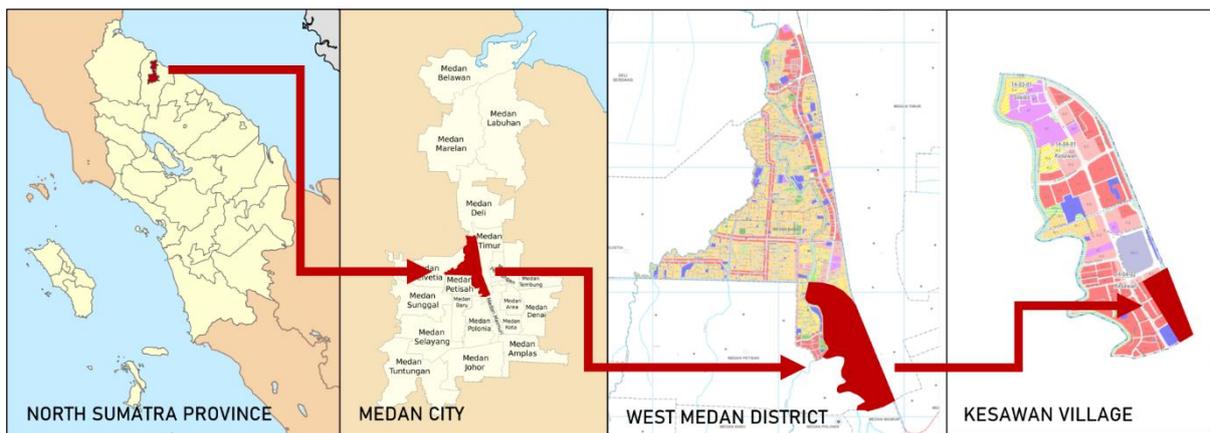
the activity occurs [1]. Based on the physical aspects of the Pajak Ikan Lama area, the rows of Chinatown shophouse buildings and local trading activities distinguish this area from others [3]. The impression of Chinatown and Medan's local culture are displayed on the environmental elements of the area. The current problem is that the Pajak Ikan Lama area only dominated by economic interests and modernization. The rapid economic growth and modernization in this area is feared to have an impact on the physical aspects and spatial quality of the area that does not show its concept and aesthetics as an old town commercial area, that can affect the imageability of this area.

The irregularity of activities that occur in the Pajak Ikan Lama area causes visitor discomfort, thus affecting visitor conditions in observing and understanding this area. One of the irregularities that occurs is the misuse of the function of the pedestrian path by street vendors and parking of motorized vehicles causing limited movement of the pedestrian path [4]. This situation also causes vehicle circulation to be less smooth passing because it is obstructed by pedestrians and other vehicles that stop carelessly, then has an impact on the obstruction of the visual appearance of shops from the point of view of vehicle users. These inconvenient conditions interfere with visitors' views in observing the area, thus affecting the imageability of this area.

Imageability is the quality of a place that is well defined, contains a multitude of different features, yet remains recognizable and memorable to anyone who has visited or lived there [5]. A place has high imageability if its certain physical elements and settings attract people, arouse feelings, and create a long-lasting impression. Many other urban design qualities influenced imageability, such as legibility, enclosure, human scale, complexity, coherence, linkage, and transparency. [6]. Places that rated high on this quality tend to be rated high on imaginability and can generate a strong image. The problems that occur in the Pajak Ikan Lama area can affect the imageability of the area, so it is worth to conduct this research which is intended to define the formation of imageability in the Pajak Ikan Lama area based on the aspects of legibility and complexity, so as to obtain input and recommendations for the direction of development of the Pajak Ikan Lama area.

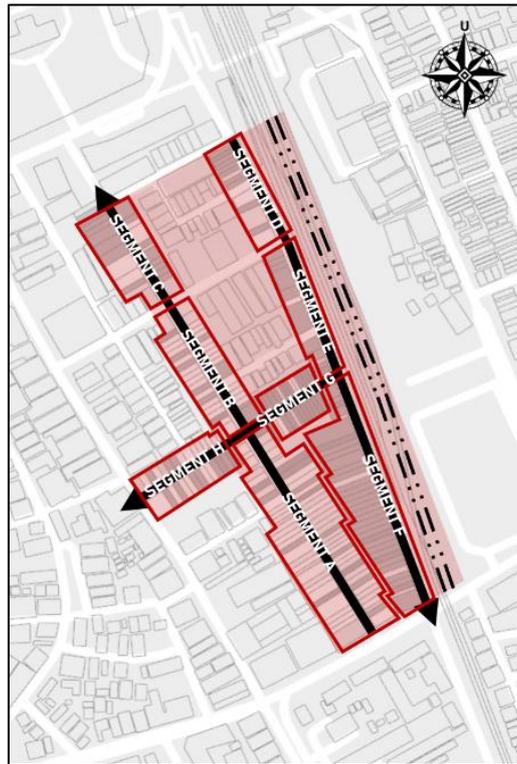
**2. Method**

The research area to be studied is the Pajak Ikan Lama area. The Pajak Ikan Lama area is one of the remnants of the past glory of Medan City located in Kesawan Village, West Medan District, Medan City, North Sumatra Province, Indonesia (Figure 1).



**Figure 1** The map of the Pajak Ikan Lama area

The research location is corridors in the Pajak Ikan Lama area, which are Perniagaan Street, Kereta Api Street, Perdagangan Street, and Ahmad Yani III Street. The researcher chose this location as the research site based on brief interviews with local workers and visitors who said that the route is commonly used by people to get to the research area. The division of road corridor segments in the study area can be seen in the following figure (Figure 2).



**Figure 2** The division of road corridor segments in the study area

The research problem was analyzed using descriptive qualitative with case study research. In analyzing, research aspects are used to assess imageability in the research area. The research aspects are measured based on measurement parameters determined through indicators. The measurement parameters and indicators can be seen in the following table (Table 1) [1,6,7,8,9,10,11,12,13].

**Table 1** Measurement parameters and indicators based on research aspects

Aspects	Measurement Parameters	Indicators
<b>Legibility</b>	Regularity of road pattern in the form of a linear pattern.	Yes/No
	District that consist commercial buildings with homogeneous visual character and activities.	Yes/No
	Nodes that consist of intersections of heavily traveled corridors or activity centers.	Yes/No
	Edge that consists of a linear element that forms a break, a street that separates two neighborhoods, or different commercial activities on a strip.	Yes/No
	Landmark that consists reference points, visual stopping points, orientation points, or contrast points in the form of building masses or objects that are recognized by the observer.	Yes/No
<b>Enclosure</b>	Limitation on the degree/hierarchy of enclosure with the minimum proportion 1:1 and the maximum proportion 2.5:1.	Minimum 1:1; Maximum 2,5:1
<b>Human Scale</b>	Podium on buildings 6 storeys and above.	Yes/No
	Arcades/canopies that mitigate the scale of tall buildings.	Yes/No

<b>Aspects</b>	<b>Measurement Parameters</b>	<b>Indicators</b>
<b>Complexity</b>	Variations of the building facade are not repeated in a row more than 3 times.	Maximum 3
<b>Coherence</b>	Repetition in building features such as walls, windows or doors.	Yes/No
	Parallel building boundaries along the street.	Yes/No
<b>Linkage</b>	Connections between buildings and pedestrian spaces.	Yes/No
	Vegetation or street furniture distribution patterns that form visual linkages.	Yes/No
<b>Transparency</b>	The condition of the walls, windows, or doors of the building on the ground floor directly connected to the street space that is not massive or reflective.	Yes/No

### 3. Result and Discussion

#### 3.1. Legibility Analysis

Readability refers to the ability of the spatial structure of a place to be thoroughly understood and navigated [6]. Legibility can be determined through the physical elements of path, node, district, edge, and landmark [12].

In terms of legibility quality, the street space contained in segment A has a linear street pattern and is defined by rows of buildings that function as shophouse buildings with trading activities dominated by the type of home decor trade. The collection of buildings with homogeneous visual characters and their activities form segment A as a trading district. There is one busy corridor intersection in segment A that can be categorized as a node, namely the intersection of *Perniagaan Street* with *Perdagangan Street* and *Ahmad Yani III Street*. There is a road that separates two environments in segment A that can be categorized as an edge, namely the intersection of *Palang Merah street* with *Perniagaan Street* which separates the office environment from the trading environment. Based on the results of brief interviews with visitors and local workers, the *garuda restaurant* and the back gate of *Tjong A Fie's house* are the objects most recognized by some observers as reference points and orientation points that can be categorized as landmarks in segment A.

The street space contained in segment B has a linear street pattern and is defined by rows of buildings that function as shophouse buildings with trade activities dominated by textile trade. The collection of buildings with homogeneous visual characters and their activities form segment B as a trading district. There is one busy corridor intersection in segment B that can be categorized as a node, namely the intersection of *Perniagaan Street* with *Perdagangan Street* and *Ahmad Yani III Street*. There are different commercial activities on the lanes in segment B that can be categorized as edges, namely *Perniagaan Street* on the South side is dominated by trading activities, while *Perniagaan Street* on the North side is dominated by other activities such as offices or services. Based on the results of brief interviews with visitors and local workers, the motorcycle parking lot and street vendors located at the intersection of *Perniagaan Street* and *Perdagangan Street* are objects recognized by some observers as reference points and orientation points that can be categorized as landmarks in segment B.

The street space in segment C has a linear street pattern and is defined by rows of buildings that function as vacant or unoccupied shophouses, although some of them function as offices or services. This collection of buildings with homogeneous visual character forms segment C as a shophouse building district. There are several intersections in segment C, but they cannot be categorized as nodes. There is a road that separates two neighborhoods in segment C that can be categorized as an edge, namely the intersection of *Perniagaan Street*

and Pinang Baris street that separates the office neighborhood from the commercial neighborhood. Based on the results of brief interviews with visitors and local workers, there are no objects that can be recognized by observers as reference points, visual stopping points, orientation points, or contrast points that can be categorized as landmarks in segment C.

The street space in segment D has a linear street pattern and is defined by rows of buildings that function as vacant or non-functional shophouse buildings, although some of them still have trading activities. The collection of buildings with homogeneous visual characters form segment D as a shophouse building district. There are several intersections in segment D, but they cannot be categorized as nodes. There are linear elements that form a break in the form of railroad tracks in segment D that can be categorized as edges. Based on the results of brief interviews with visitors and local workers, there are no objects that can be recognized by observers as reference points, visual stopping points, orientation points, or contrast points that can be categorized as landmarks in segment D.

The street space in segment E has a linear street pattern and is defined by the side of buildings such as mural walls, plant walls, and blank walls, although some of them still have trading activities. The inhomogeneous visual character does not form segment E as a district. There is one heavily trafficked corridor intersection in segment E that can be categorized as a node, namely the intersection of Railway Street with Trade Street. There is a linear element that forms a break in the form of railroad tracks in segment E that can be categorized as an edge. Based on the results of brief interviews with visitors and local workers, the mural wall and signage in the form of billboards located at the intersection of Kereta Api Street with Perdagangan Street are objects that are recognized by some observers as reference points and orientation points that can be categorized as landmarks in segment E.

The street space contained in segment F has a linear street pattern and is defined by rows of buildings that function as vacant or non-functional shophouse buildings, although some of them still have trading activities. This collection of buildings with homogeneous visual characters forms segment F as a shophouse building district. There is one busy corridor intersection in segment F that can be categorized as a node, namely the intersection of Kereta Api Street with Perdagangan Street. There is a linear element that forms a break in the form of railroad tracks in segment F that can be categorized as an edge. Based on the results of brief interviews with visitors and local workers, signage in the form of billboards located at the intersection of Kereta Api Street with Perdagangan Street is an object recognized by some observers as a reference point and orientation point that can be categorized as a landmark in segment F.

The street space in segment G has a linear street pattern and is defined by rows of buildings that function as shophouse buildings with trade activities dominated by fashion trade. The collection of buildings with homogeneous visual characters and their activities form segment G as a trading district. Segment G is the central area of activity in the Pajak Ikan Lama area, so it can be categorized as a node. In addition, there are two busy corridor intersections in segment G that can be categorized as nodes, namely the intersection of Perniagaan Street with Perdagangan Street and Ahmad Yani III Street, and the intersection of Kereta Api Street with Perdagangan Street. There are linear elements that form a break in the form of railroad tracks in segment G that can be categorized as edges. Based on the results of brief interviews with visitors and local workers, motorcycle parking lots and street vendors located at the intersection of Perniagaan Street with Perdagangan Street, as well as signage in the form of billboards located at the intersection of Kereta Api Street with Perdagangan Street are objects recognized by some observers as reference points and orientation points that can be categorized as landmarks in segment G.

The street space contained in segment H has a linear street pattern and is defined by rows of buildings that function as shophouse buildings with trade activities dominated by textile trade. The collection of buildings with homogeneous visual characters and their activities form segment H as a trading district. There is one busy corridor intersection in segment H that can be categorized as a node, namely the intersection of Perniagaan Street with Perdagangan Street and Ahmad Yani III Street. There is a road that separates two environments in segment H that can be categorized as an edge, namely the intersection of Ahmad Yani III Street with Ahmad

Yani street which separates the textile trading environment from the commercial environment. Based on the results of brief interviews with visitors and local workers, street vendors located at the intersection of Pertiagaan Street with Perdagangan Street are objects recognized by some observers as reference points and orientation points that can be categorized as landmarks in segment H.

Based on the legibility analysis, there are five segments that support the overall quality of legibility in the Pajak Ikan Lama area, which are segments A, B, F, G, and H, with each area categorized as having the five legibility elements of path, district, node, edge, and landmark. The following is a table of legibility analysis conclusions in the Pajak Ikan Lama area (Table 2).

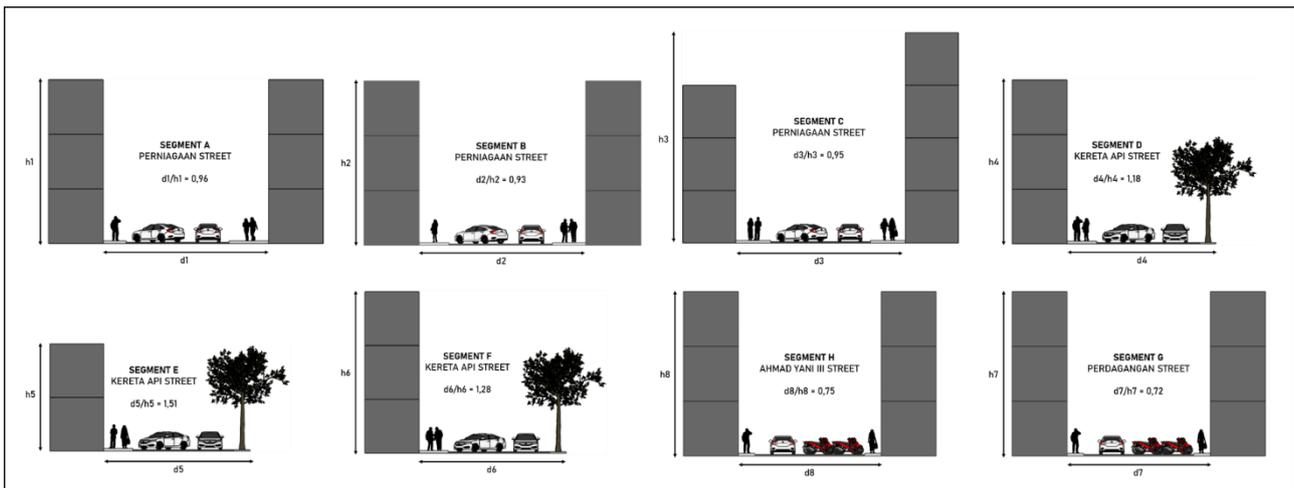
**Table 2** Analysis of legibility quality

Segments	Path	District	Node	Edge	Landmark
A	X	X	X	X	X
B	X	X	X	X	X
C	X	X		X	
D	X	X		X	
E	X		X	X	X
F	X	X	X	X	X
G	X	X	X	X	X
H	X	X	X	X	X

\*categorized as supporting legibility quality (x)

3.2. Enclosure Analysis

Enclosure refers to the gap between streets and other public spaces visually limited by buildings, walls, trees, and other vertical elements [6]. The value of enclosure can be determined based on the elevation of vertical elements that are proportional to the width of the space in between, resulting in a certain quality that makes it feel like a room. A space can be said to feel enclosed if the limitation on the degree/hierarchy of enclosure with the minimum proportion 1:1 and the maximum proportion 2.5:1 [7]. Based on the observations made, the following is the enclosure value in the corridor for each segment (Figure 3).



**Figure 3** Enclosure value

Based on the enclosure analysis, there are three segments that support the quality of enclosure in the Pajak Ikan Lama area, namely segments D, E, and F located on Kereta Api street, with each area categorized as feel enclosed, namely the space feels balanced in comparison to the distance and height of the building. The following is a table of enclosure analysis conclusions in the Pajak Ikan Lama area (Table 3).

**Table 3** Analysis of enclosure quality

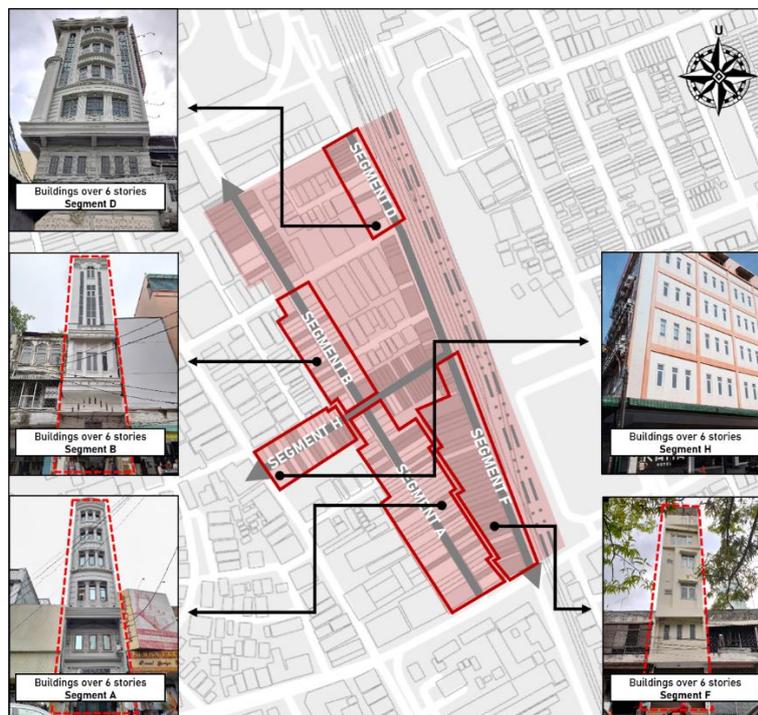
Segments	Street Name	Feel enclosed
A	Perniagaan Street	
B	Perniagaan Street	
C	Perniagaan Street	
D	Kereta Api Street	x
E	Kereta Api Street	x
F	Kereta Api Street	x
G	Perdagangan Street	
H	Ahmad Yani III Street	

\*categorized as supporting enclosure quality (x)

### 3.3. Human Scale Analysis

Human scale refers to articulation of the physical elements as well as the texture and size that match the size and proportion of humans, and most importantly, match the speed at which humans walk. [6]. Podiums in buildings 6 stories and above as well as arcades or canopies that reduces the scale of buildings height can support the quality of human scale [9].

In terms of human scale quality, buildings that have a total of 6 floors and above are found in segments A, B, D, F, and H. These tall buildings also do not have a podium. In addition, all buildings in the Pajak Ikan Lama area do not have arcades, but there is still the use of canopies on the ground floor of buildings that are connected directly to the street space, so as to reduce the scale of tall buildings (Figure 4).



**Figure 4** Human scale analysis

Based on the human scale analysis, there are three segments that support the overall quality of the human scale in the Pajak Ikan Lama area, namely segments C, E, and G. The following is a table of human scale analysis conclusions in the Pajak Ikan Lama area (Table 4).

**Table 4** Analysis of human scale quality

Segments	Buildings over 6 stories	Use of canopies
A		X
B		X
C	X	X
D		X
E	X	X
F		X
G	X	X
H		X

\*categorized as supporting human scale quality (x)

### 3.4. Complexity Analysis

Complexity refers to the visual richness of a place and can be measured from many aspects, such as buildings, billboards, and activities. Variations of building facades that are not repeated in a row more than three times can support the quality of human scale [6].

In terms of complexity quality, buildings that have facade variations that are repeated in a row more than three times are found in segments B, C, G, and H (Figure 5). Meanwhile, segments A, D, E, and F do not have facades that are repeated in a row more than 3 times.



**Figure 5** Complexity analysis

Based on the complexity analysis, there are four segments that support the quality of complexity in the Pajak Ikan Lama area, namely segments A, D, E, and F. The following is a table of complexity analysis conclusions in the Pajak Ikan Lama area (Table 5).

**Table 5** Analysis of complexity quality

Segments	Facade variations
A	X
B	
C	
D	X
E	X
F	X

Segments	Facade variations
G	
H	

\*categorized as supporting complexity quality (x)

### 3.5. Coherence Analysis

Coherence refers to a sense of a visual order that can be described through repeated elements [6]. Repetition of features on building facades in the form of architectural styles, as well as parallel building boundaries along the street can support the quality of coherence [9].

In terms of coherence quality, all segments in the Pajak Ikan Lama area have repetition in building features, especially in windows with a basic square shape as a typical Chinatown ornament. In addition, parallel building boundaries are also found along the lanes in all segments in the Pajak Ikan Lama area. This parallel building boundary is formed by the existence of a pedestrian path with a consistent width in each segment (Figure 6).

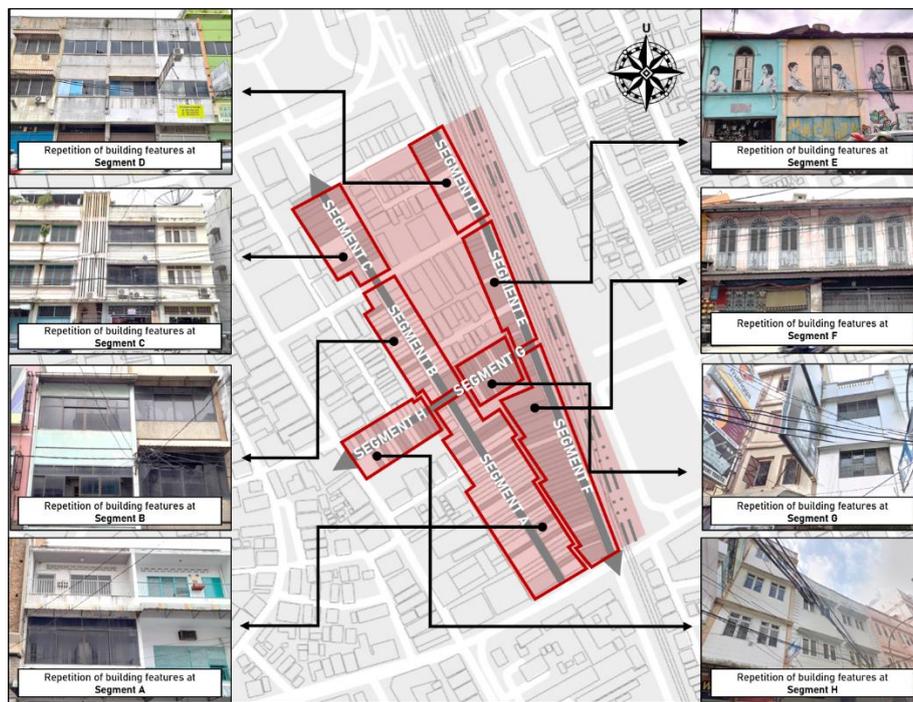


Figure 6 Coherence analysis

Based on the coherence analysis, all segments in the Pajak Ikan Lama area support the quality of coherence. The following is a table of coherence analysis conclusions in the Pajak Ikan Lama area (Table 6).

Table 6 Analysis of coherence quality

Segments	Repetition of building features	Parallel building boundaries
A	X	X
B	X	X
C	X	X
D	X	X
E	X	X
F	X	X
G	X	X
H	X	X

\*categorized as supporting coherence quality (x)

### 3.6. Linkage Analysis

Linkage refers to the physical and visual connection of building to street, building to building, space to space, or one side of the street to the other, which tends to bring different elements together [6]. Direct connections between buildings and pedestrian spaces, as well as the presence or absence of vegetation or street furniture distribution patterns that form linkages can support linkage quality [10].

In terms of linkage quality, the connection between the building and the pedestrian space is formed in all segments in the Pajak Ikan Lama area with a pedestrian path right in front of the building that is directly connected to the road space without being limited by a fence. The following is an analysis of the visual linkage in the Pajak Ikan Lama area based on street lights and vegetation (Figure 7).



**Figure 7** Linkage analysis

Based on the linkage analysis, there are six segments that support the quality of linkage in the Pajak Ikan Lama area, namely segments A, B, C, D, E, and F. The following is a table of linkage analysis conclusions in the Pajak Ikan Lama area (Table 7).

**Table 7** Analysis of linkage quality

Segments	Connections	Visual linkage
A	X	X
B	X	X
C	X	X
D	X	X
E	X	X
F	X	X
G	X	X
H	X	X

\*categorized as supporting linkage quality (x)

3.7. Transparency Analysis

Transparency refers to the way in which people can actually see what is behind the sidewalk or other public space, more particularly the way in which people can see human activities behind the sidewalk or other public space. Physical elements that may impact transparency include walls, windows, doors, fences, landscapes, and mid-block openings [6].

In terms of transparency quality, the condition of the walls, windows, or doors of the buildings on the ground floor found in segments A, B, D, F, G, and H can be clearly seen from the street space, so they have good transparency quality. Even at some points, especially at intersections in segment G, street vendors are found selling in the street space, resulting in internal activities that are externalized to the street space, supporting the quality of transparency. Meanwhile, in segment C, most of the ground floors of the buildings cannot be clearly seen from the street space, due to the use of reflective glass, which does not support the quality of transparency. Likewise, segment E with some of the buildings in its row are massive walls, so it also does not support the quality of transparency. The following is an analysis of transparency in the Pajak Ikan Lama area (Figure 8).



**Figure 8** Transparency analysis

Based on the transparency analysis, there are six segments that support the quality of transparency in the Pajak Ikan Lama area, namely segments A, B, D, F, G, and H. The following is a linkage analysis conclusion table in the Pajak Ikan Lama area (Table 8).

**Table 8** Analysis of transparency quality

Segments	Conditions
A	x
B	x
C	
D	x
E	
F	x
G	x
H	x

\*categorized as supporting transparency quality (x)

### 3.8. Imageability of the Pajak Ikan Lama

Based on the analysis of the qualities supporting imageability that has been carried out, namely the analysis of legibility, enclosure, human scale, complexity, coherence, linkage, and transparency, it is concluded that the segment that best supports the formation of the imageability of the Pajak Ikan Lama area is segment F, while the segment that is less supportive of the formation of the imageability of the Pajak Ikan Lama area is segment C. The following table shows the conclusion of the imageability formation analysis of the Pajak Ikan Lama area based on the quality of its supporters (Table 9).

**Table 9** Analysis of imageability quality based on its supporting qualities

Supporting Qualities		Segments							
		A	B	C	D	E	F	G	H
<b>Legibility</b>	<b>Path</b>	x	x	x	x	x	x	x	x
	<b>District</b>	x	x	x	x		x	x	x
	<b>Node</b>	x	x			x	x	x	x
	<b>Edge</b>	x	x	x	x	x	x	x	x
	<b>Landmark</b>	x	x			x	x	x	x
<b>Enclosure</b>	<b>Feel enclosed</b>				x	x	x		
<b>Human Scale</b>	<b>Buildings over 6 stories</b>			x		x		x	
	<b>Use of canopies</b>	x	x	x	x	x	x	x	x
<b>Complexity</b>	<b>Facade variations</b>	x			x	x	x		
<b>Coherence</b>	<b>Repetition of building features</b>	x	x	x	x	x	x	x	x
	<b>Parallel building boundaries</b>	x	x	x	x	x	x	x	x
<b>Linkage</b>	<b>Connections</b>	x	x	x	x	x	x	x	x
	<b>Visual linkage</b>	x	x	x	x	x	x		
<b>Transparency</b>	<b>Conditions</b>	x	x		x		x	x	x
<b>Total</b>		12	11	9	11	12	13	11	10

\*categorized as supporting imageability quality (x)

The findings in this study are based on the results of the analysis, namely imageability in the Pajak Ikan Lama area has not been fully formed based on the seven urban design qualities.

In the legibility aspect, some segments in the Pajak Ikan Lama area are still hard to understand in terms of orientation, especially regarding landmark elements that are used as reference points for observers in navigating. The condition of the area is quite monotonous, thus providing different understandings for each observer regarding landmarks. Even with those conditions, some objects or building masses can still be identified and used as reference points or orientation points in navigating in the Pajak Ikan Lama area, especially objects or building masses located at intersections. Observers tend to increase more attention to the

intersection area, so the elements located at the intersection have a special advantage in the Pajak Ikan Lama area with its fairly monotonous condition. One of the building masses that can be used as an orientation point when going to the Pajak Ikan Lama area from *Perniagaan* street through *Palang Merah* street is the Garuda Restaurant located at the intersection. Although the building does not describe the Pajak Ikan Lama area as a trade district, especially the type of textile trade, the building has a different function from the surrounding buildings, namely in the form of a culinary function. The use of different elements on the building facade in the form of secondary skin also gives a different impression to the building compared to the surrounding buildings that have typical Chinatown shop ornaments in the form of windows with a basic square shape. This creates a contrast in the environment so that the Garuda Restaurant building can be categorized as a landmark that supports the readability quality of the Pajak Ikan Lama area, although it does not provide an identity that is in accordance with the Pajak Ikan Lama area as a trading district with rows of typical Chinatown shophouses. The following figure is the Garuda Restaurant as a landmark (Figure 9).



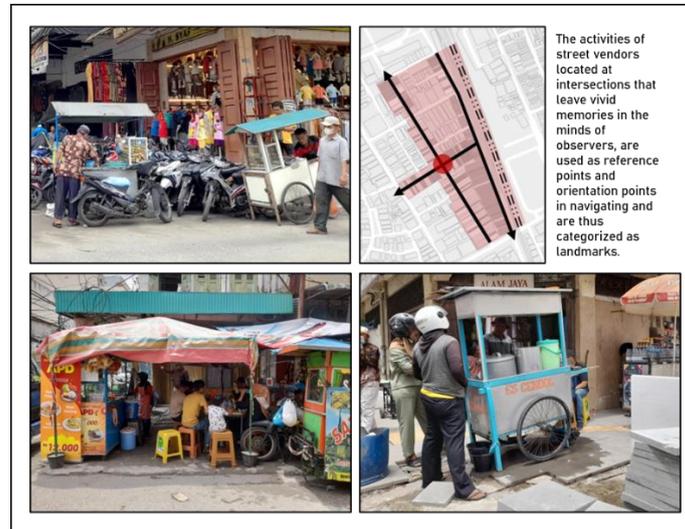
**Figure 9** The Garuda Restaurant as a landmark

Another object located at the intersection that can be used as a reference point or orientation point in navigating when heading to the Pajak Ikan Lama area from *Perdagangan* street via *Kereta Api* street is signage in the form of billboards. With its strategic position and large enough shape, this billboard can be categorized as a landmark that supports the readability quality of the Pajak Ikan Lama area. This billboard is enough to define the Pajak Ikan Lama area as a trading area by referring to certain shops and products. This billboard is located on the second floor position of the building, so it can be seen from a distance clearly, although when the observer gets closer to this object there are other objects equivalent to the visibility of the human eye that can also be used as reference points, so that the center of attention changes when it is near the intersection. The other objects are the activities of street vendors selling at the intersection. Although classified as a non-fixed object that can move, the activities of the street vendors at the intersection between *Perdagangan* street and *Kereta Api* street can be used as a reference point or orientation point in navigating, so it is categorized as a landmark that supports the readability quality of the Pajak Ikan Lama area. The following figure is billboards and street vendor activities as landmarks (Figure 10).



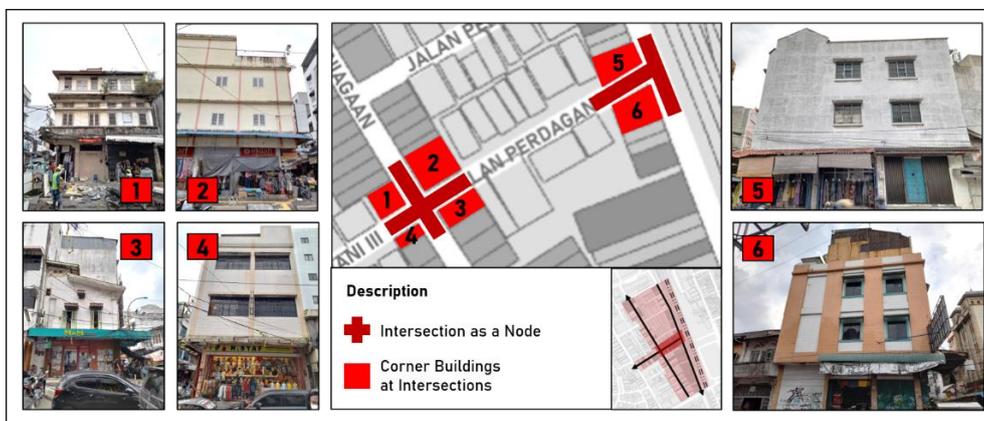
**Figure 10** Billboards and street vendor activities as landmarks

The activities of street vendors can also be found at the intersection of Perniagaan street with Perdagangan street and Ahmad Yani III street. Although there is no signage of the street name as a location when orienting in the Pajak Ikan Lama area, the street vendors can be a reference point in navigating, so they are categorized as landmarks that support the readability quality of the Pajak Ikan Lama area. Moreover, the vendors have been selling in the same location for years and have not moved, leaving a clear memory in the minds of observers who often visit the Pajak Ikan Lama area and helping them to orient themselves in the area. The following figure is street vendor activities as landmarks (Figure 11).



**Figure 11** Street vendor activities as landmarks

The uniqueness of the physical objects contained at the intersection can be categorized as nodes in the Pajak Ikan Lama area that support the formation of the quality of legibility in this area, both in terms of street vendor activities located at the intersection as a center of activity and in terms of facades in the form of buildings located at the intersection. In the Pajak Ikan Lama area, not all intersections can be categorized as nodes. This is because not all intersections are prominent enough to be imaged as nodes. Even at intersections categorized as nodes in the Pajak Ikan Lama area, such as busy intersections or activity center areas, which are found at both intersections on Perdagangan street, it is still necessary to improve the physical elements in terms of building facades so that they have a clear enough connection with the characteristics of the surrounding environment. Therefore, the concept of neighborhood connectedness within the node is needed to create a harmonious image of the area. Angles play an important role in providing proper legibility for the understanding of the observer. By considering the significance of objects located at the corner, it can affect the observer's understanding of the space in a neighborhood. The following figure is intersections categorized as nodes (Figure 12).



**Figure 12** Intersections categorized as nodes

One of the areas in the Pajak Ikan Lama area located on Kereta Api street also cannot be identified as a district. This is because the row of buildings in the area does not form a homogeneous visual character, although there

are still some trading activities around it. The Pajak Ikan Lama area is typical of its trading district, but the visual character of the area does not form a trading district, but rather a variety of types of building side walls, such as mural walls, plant walls, and blank walls that seem shabby. There is a pedestrian path along the wall, but there is no significant activity especially for pedestrians, making the area not 'alive' for pedestrians. Nonetheless, the walls create a contrast to the environment visible from the street space and become a visually distinctive object due to their difference from the surrounding neighborhood of Chinatown shophouses. This area could have potential if developed further. Development that can be done such as providing facilities and developing regulations for street vendors to trade in this area. Thus, as a potential location, this area can be categorized as a district and landmark in the Pajak Ikan Lama area. Through the homogeneous visual character of street vendor trading activities that form a district in the form of a street vendor trading district, as well as objects in the form of visually distinctive contrasting walls as landmarks, can support the readability quality of the Pajak Ikan Lama area. The following figure is the areas in the Pajak Ikan Lama area that have potential for development (Figure 13).



**Figure 13** Areas in the Pajak Ikan Lama area that have potential for development

In the aspect of enclosure, most areas in the area are considered to still create a claustrophobic impression or the space formed is too narrow and gives a sense of pressure. Elements of road space and buildings as the enclosure of the main enclosure based on the comparison are considered to be less supportive of the formation of enclosure quality in the corridor in the Pajak Ikan Lama area. In this case, a significant role is needed from the secondary enclosure in shaping the atmosphere and softening the main enclosure. Vegetation arrangement efforts in the form of tree planting at several points on the pedestrian path on *Perniagaan* street can be classified as a softscape element, but tends to be weak because it depends on the density of the tree elements planted. In addition, in several lanes in the Pajak Ikan Lama area, such as *Perniagaan* street, *Perdagangan* street, and *Ahmad Yani III* street, it is considered that there is not enough space that can be used for green lanes, so it is necessary to arrange other elements that can be used as secondary enclosures. This element is in the form of structuring the ground floor in a row of existing building masses. The degree of enclosure affects the condition of the observer in observing an area in terms of the extent to which a space has a visual boundary formed by the vertical elements contained in it, thus affecting the formation of an area's image. The following figure is softscape elements in the form of trees in the Pajak Ikan Lama area (Figure 14).



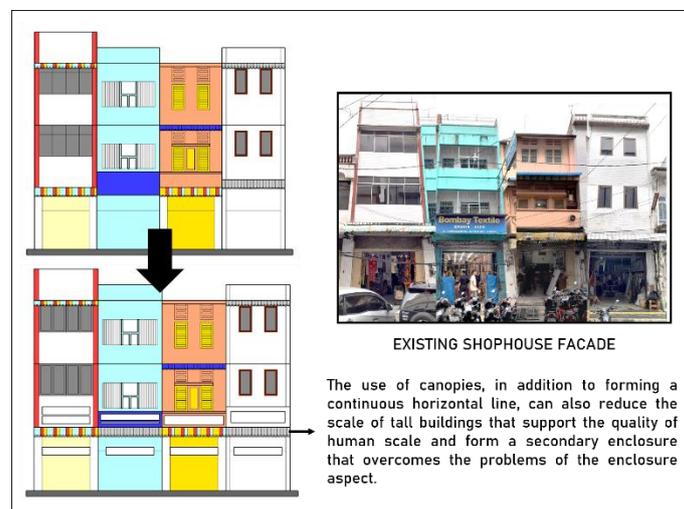
**Figure 14** Softscape elements in the form of trees in the Pajak Ikan Lama area

In the aspect of human scale, non-structural efforts to reduce the scale of tall buildings have also been made in almost all shop houses in the Pajak Ikan Lama area, namely by adding a canopy to the front of the first floor of the building. This can support the quality of human scale in the Pajak Ikan Lama area. Small-scale scoping such as canopies is needed to soften the scale of tall buildings in this area, which also affects the condition of the observer in observing the area in terms of proportion, thus affecting the formation of the area's image. The following figure is the use of canopy in the Pajak Ikan Lama area (Figure 15).



**Figure 15** Use of canopy in the Pajak Ikan Lama area

In terms of the size of physical objects, the quality of enclosure and human scale affect each other, so the handling is also related. To improve the quality of enclosure and human scale in the Pajak Ikan Lama area, further facade processing is needed, especially on the first floor of shophouse buildings as an effort to soften the effect of the degree of enclosure of its space and reduce the scale of tall buildings through the use of small-scale elements. One of the efforts that have been made in the Pajak Ikan Lama area to improve this quality is the use of canopies, but visually the use of these canopies must still be considered, especially in forming a continuous horizontal line along the row of buildings. A canopy can create the experience of a smaller space within a large volume of space, so the use of canopies can form a secondary enclosure and reduce the scale of tall buildings that support the quality of human scale. The following figure is the facade concept based on enclosure quality and human scale (Figure 16).



**Figure 16** Facade concept based on enclosure quality and human scale

In the aspect of complexity, the variation of the facades in the Pajak Ikan Lama area is considered not supporting the formation of the quality of complexity. Moreover, the condition of the area is quite monotonous, which is a row of shophouse buildings. In some areas, there are facades that are repeated in a row with the same shape and color, creating a visually 'boring' impression. Therefore, diversity in physical objects is needed to increase the visual richness of a place. The following figure is the repeated facade variations in the Pajak Ikan Lama area (Figure 17).



**Figure 17** Repeated facade variations in the Pajak Ikan Lama area

In addition to variations in building facades, the presence of signage in the form of billboards and shop signboards can also be a source of complexity that creates visual interest. With the increased interest of the public space, it helps to create an impression of a place that supports the formation of the image of the area, especially the Pajak Ikan Lama area as a trading area. The following image is one example of the diversity of billboards and shop signboards in the Pajak Ikan Lama area on Perdangangan street. Although it has a high complexity value, the coherence of the billboards and shop signboards is considered low, giving the impression of 'messiness.' It would be better if the billboards and shop signboards have similar characteristics, so that the streetscape will appear organized and attractive to passers-by. The following figure is the billboards in the Pajak Ikan Lama area (Figure 18).



**Figure 18** Billboards in the Pajak Ikan Lama area

In the coherence aspect, the quality of coherence has been well formed in the Pajak Ikan Lama area based on the repetition of building features and parallel building boundaries. The repetition of building features in the Pajak Ikan Lama area can be seen from the use of windows with a basic square shape as a typical Chinatown shophouse ornament that is still widely used in shophouse buildings in the Pajak Ikan Lama area. Likewise, the building boundaries are aligned based on the pedestrian path with a consistent width found in the Pajak Ikan Lama area. Unlike the quality of coherence on billboards which is still considered low despite having a high complexity value in this area which has been explained earlier. Although coherence is presented as the opposite of complexity, these two things are related to each other, so that in handling them they influence each other. Without variety, a coherent design will become monotonous, which can make it difficult for observers to predict the street they are walking on.

To improve the quality of complexity and coherence in the Pajak Ikan Lama area, further facade processing is needed, such as organizing the placement of billboards and shop signboards, and avoiding the use of secondary skins by maintaining basic square windows as typical Chinatown shop ornaments to maintain the character of

the facade. The following figure is the facade concept based on the qualities of complexity and coherence (Figure 19).



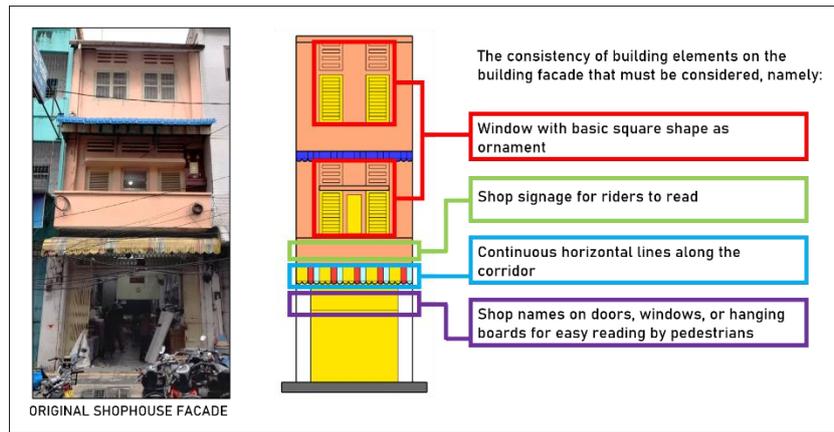
**Figure 19** Facade concept based on the qualities of complexity and coherence

In the aspect of linkage, the Pajak Ikan Lama area already has a good overall connection based on the connection between the building and the pedestrian space formed in this area. Meanwhile, based on the visual linkage relationship pattern, the relationship pattern has not been fully formed in some areas. This is because the type of lamp used in a path has a type with different heights, namely on Perdagangan street and Ahmad Yani III street. With these different heights, the linkage pattern is not clearly formed, so it does not form a connection. Street lights form a visual relationship pattern well at night, especially on Perniagaan street and Kereta Api street. The resulting relationship of the streetlight patterns creates a 'corridor' pattern on these lanes. This greatly assists the observer in driving at night by increasing the connectivity that occurs longitudinally along the lane when passing through this area. The increased connectivity can provide ease of movement in the Pajak Ikan Lama area which also affects the formation of the area's image. The following figure is the streetlights in Pajak Ikan Lama (Figure 20).



**Figure 20** Streetlights in Pajak Ikan Lama

Based on the vegetation layout, visual linkage patterns are not formed on Perniagaan street. This is because the layout of vegetation on the road tends to be inconsistent, so it does not form a visual linkage pattern. Likewise, Perdagangan street and Ahmad Yani III street do not have tree points. In these three lanes, namely Perniagaan street, Perdagangan street, and Ahmad Yani III street, it is considered that there is not enough space that can be used for green lanes. Even so, a visual linkage pattern is still created on Perniagaan street based on the layout of its street lights, unlike Perdagangan street and Ahmad Yani III street which do not have a visual linkage pattern. Therefore, it is necessary to organize other elements that can improve connectivity, not only in these two lanes but also throughout the Pajak Ikan Lama area. This element is in the form of a row of existing building masses, namely by paying attention to the consistency of building elements on the building facade. By setting the facade concept on the row of shophouse buildings, in addition to creating connectivity, it can also affect the formation of the area's image. The following figure is a facade concept that creates connectedness (Figure 21).



**Figure 21** A facade concept that creates connectedness

In the aspect of transparency, the existence of street vendor activities in the pedestrian space in the Pajak Ikan Lama area can support the formation of the quality of transparency. Outdoor dining or sales is one example of transparency, namely through externalizing internal activities by bringing them to the pedestrian path. Pedestrian space in the Pajak Ikan Lama area with a variety of activities, especially the activities of street vendors, has good transparency with vehicle road space, but irregular conditions create a bad impression on the area, so regulation is needed. Street vendors can be placed by dividing the pedestrian path, thus providing space for traders and space for more organized pedestrians. Timing for suppliers is also needed so that the loading and unloading of goods does not interfere with activities at busy times. In the morning when street vendors have not yet started their activities, parking areas are prioritized for suppliers, shoppers, and emergency vehicles. The pedestrian path is free from the attributes of street vendors, so that the circulation of suppliers and emergency vehicles is not obstructed by parking vehicles. Thus, the activities of street vendors do not interfere with pedestrian space and can support the quality of transparency in the Pajak Ikan Lama area, so as to support the formation of a good regional image. The following figure is the activities of street vendors in the Pajak Ikan Lama area (Figure 22).



**Figure 22** Activities of street vendors in the Pajak Ikan Lama area

Overall, the imageability of the Pajak Ikan Lama area in the Southeast is superior to that in the Northwest. In addition to the analysis of the seven supporting qualities that discuss physical objects, one of the factors that also affects the formation of imageability in the Pajak Ikan Lama area is based on activities or activities. The following figure is the formation of imageability in each segment in the Pajak Ikan Lama area (Figure 23).



**Figure 23** The formation of imageability in each segment in the Pajak Ikan Lama area

On the Southeast side, trading blocks are formed between segments A, F and G, so in terms of activity, a lot of trading takes place in these areas. Many of the large shops in the Pajak Ikan Lama area are located between the intersections of the three segments, so they tend to invite visitors to come to the area. Meanwhile, on the northwest side, segment C, in terms of activities, is dominated by office and commercial activities. Moreover, supported by interviews with local merchants who have been selling there for decades, the Pajak Ikan Lama area initially only existed up to the intersection of Pembelian street, which is located in segment B. Due to development, the Pajak Ikan Lama area was initially only located up to the intersection of Pembelian . Due to development, the Pajak Ikan Lama area extended to Gwangju Street, the intersection between segment B and segment C, although the area is not dominated by trading activities. The different types of activities create a different impression on each area in the Pajak Ikan Lama area, thus affecting the image formation in this area.

The formation of a high imageability value in the Pajak Ikan Lama area can make the place easy to remember and recognize because it has a specialty. This specialty can affect the sense of place of the area which can increase the attractiveness of visitors. This provides potential for the Pajak Ikan Lama area as a tourist destination, especially its distinctiveness as a commercial area of the old city which is a Chinatown area.

The Chinatown character is strongly attached to the Pajak Ikan Lama area based on its physical condition, namely the rows of Chinatown shophouse buildings and their trading activities, especially the textile trade. As a trading area, this area has developed greatly since the Dutch military aggression II era that occurred in 1949. The historical value contained in this area should really be maintained and preserved, even though this area will continue to grow. For this reason, attention is needed to the physical aspects and quality of space so that the concept and aesthetics of the Pajak Ikan Lama area as the old city commercial area are maintained, so that it can also form a high imageability value in this area.

The formation of a high imageability value in the Pajak Ikan Lama area can also support walkability in the area. The condition of pedestrian space in the Pajak Ikan Lama area is good enough with the widening of pedestrian space so that it has a greater density, but this is not enough to invite pedestrians to be interested in walking in this area. The existence of distinctive visual characteristics and activities in the pedestrian space can make the pedestrian space more attractive to pedestrians, such as visual diversity based on the complexity

of building facades, visual order based on coherence or consistency in certain facade elements, physical and visual connectivity that unites different components based on the distribution pattern of physical elements in the area in the form of vegetation or street furniture, the proportion of these physical elements in the area and its comparison with road space, and transparency in road space in the form of internal activities that are externalized in the form of more organized street vendor activities.

Imageability is also related to the permeability or accessibility of achieving a space which is influenced by one of the supporting qualities of imageability, namely legibility. Accessibility can be supported by clear paths and nodes, districts that can be found in a block, edges that can indicate the boundaries of an area, and landmarks that characterize it well. By presenting an area that is legible or can be interpreted as easy to orient within the area, the accessibility of achieving one's place will be easier, so that it can increase permeability.

#### **4. Conclusion**

Through the analysis of seven qualities that support the formation of imageability in Pajak Ikan Lama area, it was found that the imageability of this area has not been fully formed based on these qualities. It is still necessary to improve certain qualities in segments that are considered to have low imageability values. Places that have a high value on these supporting qualities tend to have a high value on imageability and can generate a strong image, so the development of Pajak Ikan Lama area still needs to be improved.

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#### **6. Conflict of Interest**

The authors declare no conflict of interest and this research received no external funding.

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